DOCUMENT RESUME

ED 043 991 EC 030 427

AUTHOR	Napier, Grace D.; Weishahn, Mel W.
TITLE	Handbook for Teachers of the Visually Handicapped.
INSTITUTION	American Printing House for the Blind, Louisville, Ky.
SPONS AGENCY	Bureau of Education for the Handicapped (DHEW/OE), Washington, D.C.
BUREAU NO	BR-272036
PUB DATE	Sep 70
GRANT	OEG-2-6-062289-1582(607)
NOTE	117p.
EDRS PRICE	EDRS Price MF-$0.50 HC-$5.95
DESCRIPTORS	*Exceptional Child Education, Instructional Materials, Program Planning, *Teaching Guides, *Teaching Methods, *Visually Handicapped, Visually Handicapped Mobility, Visually Handicapped Orientation
IDENTIFIERS	Elementary and Secondary Education Act Title III

ABSTRACT

Designed to aid the inexperienced teacher of the visually handicapped, the handbock examines aspects of program objectives, ccntent, philosophy, methods, eligibility, and placement procedures. The guide to material selection provides specific information on the acquisition of Braille materials, large type materials, recorded materials, direct reader service, and sources for educational aids. Suggestions for the regular classroom teacher of a blind student include the use of resource or itinerant teacher, methods to aid the blind child in his adjustment, and the maximum use of time and circumstances. Techniques in the area of orientation and mobility are included with illustrations, and common visual impairments (such as glaucoma, nystagmus, and retrolental fibroplasia) are described. Sample forms and a bibliography concerning education of the visually handicapped are included. (RD)

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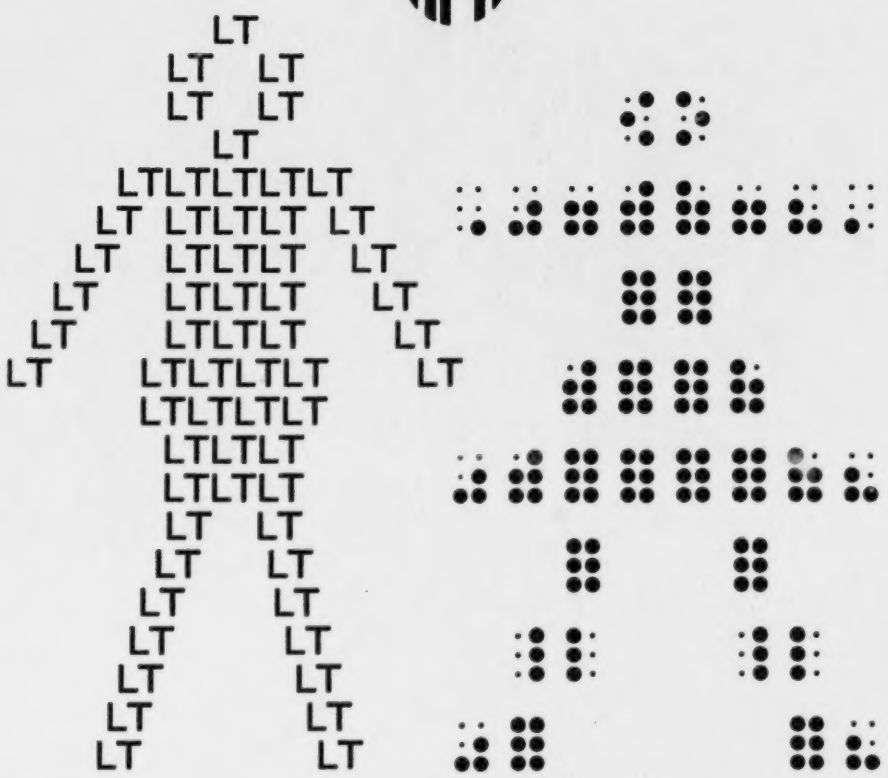
HANDBOOK FOR TEACHERS of the VISUALLY HANDICAPPED



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HANDBOOK FOR TEACHERS of the VISUALLY HANDICAPPED

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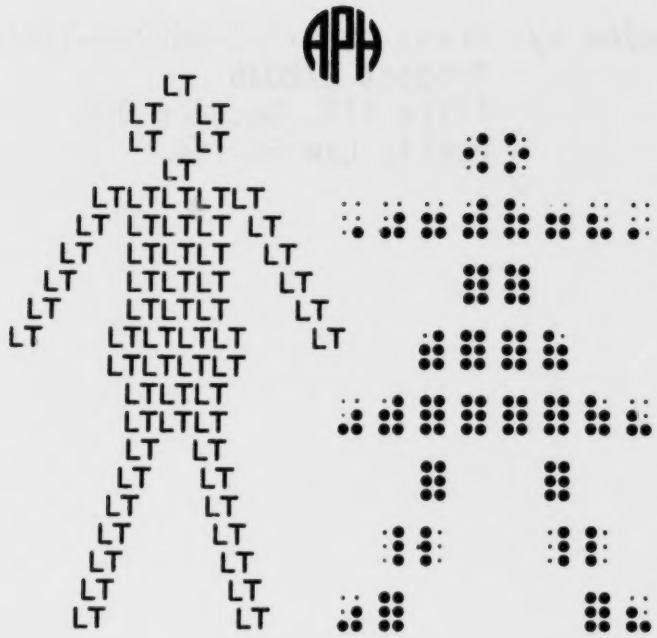

Second Printing Provided and Distributed by the Instructional Materials
Reference Center for Visually Handicapped Children
American Printing House for the Blind
1839 Frankfort Avenue
Louisville, Kentucky 40206
September 1970

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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In Cooperation With the
U. S. Office of Education
Bureau of Education for the Handicapped

Funded by: Grant #OEG-2-6-062289-1582(607)
Project 272036
Title III, Section 302
Public Law 88-164

PREFACE TO APH EDITION

This publication, Handbook for Teachers of the Visually Handicapped, by Dr. Grace D. Napier and Mr. Mel W. Weishahn previously printed and distributed by the Rocky Mountain Special Educational Instructional Materials Center has been so widely requested on a nationwide basis that the Instructional Materials Reference Center at the American Printing House for the Blind has agreed to publish this handbook for national distribution with changes which make its scope national rather than regional. This second edition was edited by Mrs. Betty Womack of the Kentucky School for the Blind and Mrs. Amie L. Dennison of the Instructional Materials Reference Center/American Printing House Staff.

It is the sincere desire of the authors, the RMSEIMC and the IMRC Staff at APH that this handbook will be of value. Copies are available for teachers of the visually handicapped at no cost from the Instructional Materials Reference Center, American Printing House for the Blind, 1839 Frankfort Avenue, Louisville, Kentucky 40206.

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Second Printing Provided by the Instructional Materials Reference Center
American Printing House for the Blind
1839 Frankfort Avenue
Louisville, Kentucky 40206
This Project Supported by the United States Office of Education
Bureau of Education for the Handicapped
APH/IMRC
Louisville, Kentucky 40206
1970

FOREWORD
(to original edition)

The Handbook for Teachers of the Visually Handicapped is the second in a series of handbooks for teachers of the handicapped, published by the Rocky Mountain Special Education Instructional Materials Center RMSEIMC, a project funded by the United States Office of Education, Bureau of Education for the Handicapped, and located at the Department of Special Education, Colorado State College, Greeley, Colorado.

This publication is designed as a service for the beginning or inexperienced teacher of the visually disabled in the five states of: Montana, Wyoming, Colorado, Utah, and New Mexico. (Very similar circumstances exist in all states. In order to know exact procedures contact the Department of Special Education in your state. If you desire you may write to APH and get the name of the ex-officio trustees for your state. Use the sections of this book concerning the five states Montana Wyoming, Colorado, Utah and New Mexico as samples.) It is intended to acquaint the beginning or inexperienced teacher with a wide variety of information about the visually disabled child and some of the educational services that may be used in offering programs for this child.

The handbook is not intended to be a complete source of information, nor is it necessarily designed for educators with a great deal of experience in working with the visually disabled. Much of its content will be periodically revised in order to keep all of the information up-to-date. Any suggestions relative to the inclusion of additional information, topics, or discussions would be greatly appreciated by the writers and the publishers. Through constant updating and revision, we hope to make this handbook a source of timely information for the new inexperi-

enced educator of the visually disabled.

The RMSEIMC is most grateful to the co-authors, Dr. Grace D. Napier and Mr. Mel. W. Weishahn of Colorado State College's Department of Special Education. Their contribution of long hours and consistent effort has done much to insure any success this handbook might enjoy.

Recognition should go to the American Foundation for the Blind who granted the RMSEIMC permission to use the material, ... "Tips to the Regular Classroom Teacher," taken from Ysabel Johnson's A Blind Child Becomes a Member of Your Class (American Foundation for the Blind Publication: Educational Series, No. 14; New York, June, 1961).

Thanks should also go to: Mr. Fred Guffey who wrote the section, "Common Visual Impairments and Related Problems", Mr. Woodrow Schrotberger who wrote the section on "Orientation and Mobility"; Mr. James Brisnehan who formulated the illustrations; and Mrs. Linda Tetsell who illustrated the section on "Orientation and Mobility."

Many of the items referred to in the bibliography ... may be borrowed from the RMSEIMC's holdings if the borrower is registered with the Center.

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INTRODUCTION

A. Purpose

The purpose of providing special education for visually disabled children is manifold. The several aspects are discussed below.

In a democracy as practiced in the United States, public schools have the responsibility to educate all the children of all the people. This charges school personnel with the political and moral obligation of teaching the child who is visually disabled as well as his normally seeing siblings and neighbors. In a democracy, every individual is important and worthy of opportunities to learn.

A child who has been labeled "blind" may have residual vision by means of which some visual concepts can be acquired. Because a "blind" child may identify color, look at a picture at close range, see an object reflecting sunlight, or retrieve a fallen article, etc., such behavior is still legitimately within the definition of "blind" and should not be interpreted as malingering, deception, or hysteria. In spite of the things that this child can see, there are many more visual tasks that he is incapable of doing because of limited and imperfect visual functioning beyond his control. Instead of being viewed with suspicion and doubt, he needs to be encouraged to utilize his residual vision wherever it can serve him in learning experiences. Just as a child who lisps may need therapy to learn how to speak at a higher level of functioning, so a child with residual vision needs "therapy" or stimulation so that he can learn how to see at his highest efficiency level. By contrast, the totally blind child is so conspicuously blind that the observer readily concedes that such a youngster, if he learns at all, must accomplish learning without aid from the visual channel.

Although the "blind" child -- with or without residual vision -- cannot learn in exactly the same ways that normally seeing children do, he can learn when materials, methods, and experiences are directed primarily toward his other channels responsible for acquisition of knowledge about himself and his environment, namely, hearing, touching, smelling, tasting (where feasible), motor-kinaesthetic sensations, and thinking. Unless otherwise indicated, this child understands language when you speak to him and responds to you with speech. Specially prepared teachers (through special education programs) provide him with appropriate opportunities for learning.

When provided with a suitable educational program, the child or adolescent who is blind can realistically expect to be employable as an adult member of society. As an employed adult, he can earn his own income and be partially and even completely self-supporting, not needing pension checks or welfare checks from public funds. Although special education programs for the blind are extremely expensive in terms of dollars spent (when compared with the per capita cost for the normally seeing), the expenditure is of limited duration, that is, from nursery school through college for some. After this time, however, the blind individual can then begin earning his own income and not be a financial drain on society; he might even be a tax payer. Without special education, he probably would become entirely dependent on others for his maintenance for the remainder of his lifetime. The latter arrangement is far more costly than the expenditures involved in special education programs.

Special education programs endeavor wherever practicable and beneficial to teach the child in his community with a minimum of uprooting and disrupting of his normal life routine and contacts with seeing persons.

Historically, society has demonstrated a variety of attitudes (resulting in practices and related practices) toward members of minority groups in general and blind individuals in particular. Ancient Greece and Rome, for example, neglected, persecuted, abused, and even deliberately destroyed "inferior" or "different" individuals. Much later, society pitied, protected, and separated the handicapped from itself by establishing asylums or institutions which became "homes" for the handicapped from infancy to the grave. These were not schools offering educational programs or training for employment in adult life. Many educators, psychologists, and other professionals today are promoting the practices of intergration of the disabled with the "normal" and acceptance into general society of individuals who are different, providing not only academic education but also training in social skills, mobility skills, vocational preparation, vocational placement, and recreational outlets.

The brief summary above aims at acquainting you with the rationale behind present day education programs for the visually disabled. Furthermore, such programs are not necessarily remotely related to your role in general education. On the contrary, you may become an integral part of the special education program as it involves and services a child in your own classroom.

B. Content

In terms of content or curriculum or "what to teach" area, visually disabled children need (1) to acquire and use the same basic learnings as normally seeing children and (2) additional skills that must become formal parts of the program rather than be achieved through incidental learning or instruction at home.

Children who are visually disabled have life needs requiring skills in computation or problem solving in number situations, skills in communication (listening, speaking, reading, writing), skills in coping with bodies of information contained in such fields as social studies, science and health, music and art, skills in recreational outlets, and skills in interpersonal relations and mental health, etc. Hence, one can say with safety that almost everything that a normally seeing youngster learns, a visually disabled child also needs to learn, with some modification or substitution. For instance, a blind child will not use a pencil or pen as his chief mode for writing, but he will learn to write in some other mode such as in braille or on the typewriter, though he may learn to sign his name or write a few other symbols. The totally blind adolescent is not likely to be accepted for active participation on the football team as recreation or physical development activity, but many normally seeing adolescents are not accepted for the team either, since only a few individuals are required for a team.

What is often referred to as "special methods" for the blind applies more correctly to special equipment and materials. Whereas the totally blind child will not use a pencil as his chief instrument for writing, he will write by means of a braille writer and/or a typewriter. Although he will not use print editions of textbooks, he will use braille editions or others on disc or magnetic tape recording, for example. Even if he does not use pictures in his early number work, he will use concrete and tangible objects to manipulate and count. Though he does not utilize a print wall map, he can use a relief or embossed map and read it with his fingers.

Because the child with little or no vision cannot see enough to

imitate others, he requires formal teaching in areas where normally seeing children learn easily and incidentally through visual stimulation, even without help from adults. Normally seeing children may come to school having many necessary skills already under control whereas the blind child may be functioning on a much lower level. For instance, the visually disabled child may demonstrate need for corrective work in body mechanics and posture. He may hold his head down, droop his shoulders forward, or walk with tiny shuffling steps. If he comes from an excessively protective home, he may lack experience in moving about on his own power without being led by the hand. This is, of course, after he is familiar with his surroundings and not in danger. Because he cannot see, his table etiquette may need improving; he may not know how to butter his bread, cut his meat, or eat properly with a fork. Because he cannot see, he needs training in orientation and mobility -- skills in moving himself from place to place, doing it with sufficient speed in keeping with safety, efficiency, self-confidence, grace, and poise. Instead of just glancing about to determine the immediate environment of the classroom, for instance, he will need a guided tour to acquaint him with the location of coat room, teacher's desk, bookshelf, piano, etc. In the realm of physical education and active games, he will probably be unable to execute the teacher's directions if she says to the class such things as "Hold your arms <u>this</u> way" or "Run to the goal over there". The teacher must put her directions into meaningful words and not rely on gestures to convey meaning.

In these "extra" areas of the curriculum, the teacher should not regard the child's inadequancies as evidence of mental deficiency or personality quirks. Rather, he should be viewed as a child who, if he

could see, would probably have acquired the necessary behavior or skill through the visual channel. Lacking this visual channel, however, he will have to learn the desirable behavior or skill through channels other than vision. Such learning takes longer to acquire and often requires a one to one relationship with the teacher.

C. Philosophy

In section A of this chapter, the rationale underlying special education for the visually disabled was discussed. In the present section, the writer attempts to consider the philosophy by which educators and psychologists approach the child who has less than normal vision.

The visually disabled child is considered to be more <u>like</u> normally seeing children than <u>different</u> from them. True, he cannot see well or see at all, but basically, he is a child with the same needs for belonging, acceptance, achievement, self-actualization, opportunity for learning and encouragement to grow and gain independence. The responsibility of education for all children is emancipation and not imprisonment of those being taught. It is very easy for some teachers (who have exaggerated need to be appreciated) to teach the child -- and especially the disabled child -- to lean on them and remain on a dependency level, feeding the ego of the teacher rather than providing the child with skills for mastering himself and his environment, thereby gaining independence and maturity. Viewing the visually disabled child as being fundamentally similar to other children emphasizes his potential and minimizes his limitations. This by no means implies that his visual limitation is not a problem. It definitely is a problem; otherwise, we would not be concerned about providing him with special education. However, the difference is that he is a child with a problem and is not a problem child

or a child who is totally disabled, totally dependent, totally different from other children.

The visually disabled child is an individual just as other children are individuals. A group of visually disabled children consists of individuals; they are not identical with each other merely because of their visual problem. The visual disability may be the only factor that they have in common. Mary may be an avid reader while Jane prefers to play with dolls. Jim may like to play the piano while John enjoys tinkering with the inner workings of a radio. Sue may be very bookish, academic, and stilted in matters of content and information but may not relate well to other persons. Bill may do only mediocre work where books are involved (even though he has high ability), but have many friends and demonstrate leadership ability. Therefore, a given blind child may, in fact, have more in common with normally seeing children than with other blind children.

Because the child is an individual in his own right, a caution must be mentioned here since it is very easy and yet so dangerous for the unsophisticated to generalize and attribute all successes and all failures to the blindness itself, as a way of explaining or excusing them. If Mary talks too much in class and is a disrupting influence, the teacher might say (but mistakenly) that because Mary cannot see, she has to talk a great deal to make up for it. Are there no normally seeing children who talk too much? If John does sloven work in arithmetic, does this mean that arithmetic is too difficult for a blind child? No. Is there no child in class who submits messy work, if not in arithmetic, then maybe in spelling, science, or penmanship?

Discipline and corrective measures do not necessarily have to be

different when administered to the blind child. For instance, a teacher of first grade might use with her normally seeing children the technique of having a disobedient child stand outside the classroom door for a period of time. This is perfectly acceptable treatment of the blind child also. Unfortunately, some teachers find it impossible within themselves to mete out the same kind of correction where the blind child is involved. If this differentiation continues, three unhappy developments may result: 1. The blind child will soon discover that the teacher is a push-over and will take advantage by being obnoxious, feeling confident that he will not be punished anyway. 2. The seeing children will resent the blind child and his behavior, noticing the injustice with which he is allowed to violate classroom standards, infraction of which by them would bring punishment. 3. The seeing children will lose respect for the teacher, because partiality and favoritism is shown, as they see it.

Trying to evaluate the quality of the work performed by a child with a visual loss is usually difficult for the uninitiated teacher. She may regard whatever he does as "wonderful" and "spectacular" when it is only mediocre or even poor. The teacher should attempt to see this child as a third-grader or as a twelve-year-old and should measure his performance against these standards not think of him as a blind child whose poorest productions are regarded as superior. A child whose intellect is normal or even better is stimulated by high though reasonable standards and expectation levels. If the teacher sets the standards too low for him, the child is likely to meet low standards even though he is capable of complying with more demanding ones. Thus, he is being trained to do less than his best. If this continues throughout his school life, he is likely to be unemployable, because he is unprepared to give his

best efforts to the job for which he has been hired. Furthermore, the child can usually sense when adults are patronizing and condescending in attitude; the child may resent such adults, especially when the child has a realistic opinion of his own ability. He may reason: "What's the use of trying anyway? They think I'm a dumbbell." What is even more damaging, he may adopt the same attitude toward himself as the teacher and assume that he is incapable of better work and never really stretch to attain the goal.

Competent and creative teachers look to the child's future as well as to the immediate here and now in order to weigh the consequences of their management procedures. This child will grow into an adolescent and an adult. What kind of future product will he be, based on the present management of him?

D. Procedure for Operation and Development

In order to understand the current scene relative to operation and development of programs, the reader needs to appreciate how the present day facilities have evolved historically, moving ahead step by gradual step as philosophies changed and new programs demonstrated success at that level. What was once considered a faltering or daring move becomes accepted as legitimate and reasonable. Only then is a new and daring step attempted again.

Under Purpose in this chapter, societal attitudes were mentioned, namely, viewing the blind individual as liability to society, later as ward of the state, and more recently as integral and responsible member of the community. When education of the blind began in Paris in the late eighteenth century, the residential school naturally evolved from the asylum. For more than a century, the residential (boarding) school was

the only type of program available. The first three residential schools in the United States, established in the 1830's were patterned after those already in existence in Europe. The underlying premise was that, although the blind were educable, they had to be educated separately from the normally seeing in order to learn. Consequently, blind children lived in a community of their own, removed from parents and other normally seeing persons (except school personnel) for the greater part of each school year.

Educators and psychologists and parents were disturbed by the fact that blind children had to live apart from family and home neighborhood. Feeling confident that blind children could learn effectively even if they lived at home and attended an educational program within commuting distance, educators established special classes for the blind and/or partially seeing in public school buildings, centrally located so that a given class could serve several children who would come daily from outlying districts. Although an innovation about 1900, such a class was but one step removed from the residential school, because the blind children stayed in one room all day, working with a specially trained teacher who was responsible for all teaching, regardless of grade level or subject matter. There was little or no contact with normally seeing children and their teachers in the same building. Because the special class was similar to the old-fashioned one-room school, segregation from the seeing was practiced, resulting in lack of communication between the two groups. These classes did not close the residential schools -- and this was not their intent -- but provided a second type of facility operating simultaneously.

Encouraged by the demonstrated success of the segregated or special

classes, educators believed enough in the adaptability of selected blind children to venture even farther away from the residential school idea by proposing the cooperative plan. In this, the blind child still leaned very heavily on the special class and its teacher but spent part of each school day in other rooms of the building, associating with normally seeing children and learning from regular classroom teachers. For example, fourth-grade Mary might go to Miss Jones' room for history and sixth-grade Tom to Mrs. Brown's for science. Meanwhile, the blind child was officially assigned to the special room in terms of attendance records (and other administrative information) and work involving the learning of braille or the use of special equipment such as the typewriter. This plan was flexible in that each blind child was seen as an individual, able to benefit from certain amounts of integration with the normally seeing. As the child manifested readiness for more, his program was modified to include more periods in the regular classrooms. Consequently, some children might be doing all their subject matter work with the normally seeing while others were going only on a part-time basis or, realistically, not at all.

An evaluation of this type of program would have to say that the program was only as good as the special teacher wished to make it. If she were an individual with her own insecurities and needs to be appreciated, she might find it necessary to limit the children's association with normally seeing children and their teachers in order to enhance her own status with the children -- promoting dependency. On the contrary, a teacher who was well adjusted would probably encourage integration in order to develop independence in her pupils. Another problem was that the special teacher might meet with resistance from the rest of the

faculty. The faculty might reason that it had no responsibility to the blind child and since the special teacher had been specially trained to teach them, she should do so and not force the children on the other teachers who already had 35 or 40 children to teach. So the special teacher would need to establish excellent rapport with the faculty and be a successful saleswoman so that the faculty would want to have blind children in their classes.

The cooperative plan usually functioned only through about eighth grade. After that, the blind child would attend either a residential school or, more likely, his own local public high school, perhaps as the sole blind student in the building. In the latter arrangement, there would be no "special" classroom for him, because by that time he should have gained sufficient independence and academic skill to be able to function on a more mature level as long as he was provided with special materials (such as braille textbooks and typewriter, etc.) and special services (such as a human reader). He moved from room to room as the departmental plan dictated and met all assignments and standards of performance.

With little supervision from a teacher acquainted with education of the blind, the public high school student might do only as well as he wanted to, regardless of his ability. If he wished to succeed, he might work conscientiously and do commendable work, even when compared with the work done by normally seeing students. On the other hand, he might be satisfied with mediocre performance, and the school personnel might accept this as being his best efforts, not understanding that he was capable of doing better if urged. Therefore, the student's report card might be misleading since one could not be sure if C was the best that

the student could do or if he was not really trying. Similarly, an A might be a grade truly earned, or it might be given by a generous teacher who marveled at whatever the blind student did.

Historically, three plans were then being offered concurrently. This does not necessarily mean that a child living in a given community had the choice of A, B, or C. Though three plans existed nationally, a specific town might have no special provision for the blind child, requiring him to attend the residential school wherever it happened to be located, taking him away from home. Some segregated classes emerged into the cooperative plan. Town A might have the segregated plans while Town B had the cooperative. Often a cooperative class was established without its ever having been the segregated type. The nature of the class was usually a reflection of the personality and philosophy of the school administrator or of the teacher herself.

In the late 1940's, the resource room plan was becoming more popular. A change of philosophy saw the blind child as one who should be an integral part of the regular class for normally seeing and not one set apart by belonging to a "special" room in the building. Administratively, the blind child was an official member of the regular attendance roll. Hence, Miss Wood, teacher of second grade, would have Johnny, a blind child, assigned to her. In the building would be the resource room where the specially trained teacher of the blind would have her supply of special equipment and where she would work with a given child who came to her at assigned periods or as needs dictated. Understandably, a first-grade visually-disabled child would spend more time in the resource room than a sixth-grade child, because the former may be learning to read

and write through braille, whereas the sixth-grader probably has these skills well under control. All teachers must work cooperatively if the blind child is to benefit from this plan. The resource room teacher is responsible for preparing materials such as copying a test into braille or on the large-print typewriter, for supplying parallel texts so that the blind or partially seeing child can use the same texts as the seeing children, for anticipating needs such as a map of the United States for fourth-grade Sue or a certain poem for seventh-grade Bill. The regular classroom teacher must know how and when the resource teacher can help her, and the resource teacher must be familiar with content, materials, and methods for all grades in order to anticipate needs and to tutor a child.

Like the cooperative plan, the resource room plan is most often found on the elementary, sometimes extending into high school levels. The junior or senior high school student may attend his local school and be quite independent.

Also in the 1940's came into being the itinerant teacher plan. Under this arrangement, the specially trained teacher moves from school to school throughout her day, visiting and teaching individual visually disabled children. Her itinerary may be confined to a given town or city or may encompass a county or include more than one county. When she becomes familiar with her case load, she tries to distribute her time according to individual needs and geographic location. For instance, a first-grade child may require a daily visit whereas an eight-grade pupil may need only a weekly contact. If three children are located close to each other geographically, the teacher may be able to visit all three in one morning; if they are scattered more widely, the teacher may visit two

in the morning and one in the afternoon.

When the itinerant teacher arrives at a given school, she may do one or more of the following: tutor the blind child, observe him in his regular classroom, confer with the teacher while the children are with another adult (such as with the music teacher), prepare materials (such as a test that will be given that day), read the child's braille work papers and either score them with a pencilled notation such as ("Eight arithmetic examples correct") or copy in print what the child has written in braille for a history assignment so that the regular teacher (who does not read braille) knows what the blind child has done. If the special teacher plans to tutor the child, the child leaves his classroom and works somewhere else in the building with the itinerant teacher. When the itinerant teacher leaves the building, the child returns to his classroom and resumes work with that teacher.

The resource room plan and itinerant teacher plan might be contrasted here. A more mature and independent child should be selected for the itinerant teacher plan than resource room plan, because the special teacher is not available the entire school day. Unexpected needs cannot be met as easily or quickly in the itinerant teacher plan; for instance, if the child needs a certain map, he will have to wait until the special teacher brings it next or mails it to him. Because the itinerant teacher is in a given school only for an hour or so, she may spend most of her time tutoring and neglect conference time with the teacher and other school personnel, resulting in communication breakdown between itinerant teacher and others. Each goes her separate way; each tires to guess what the other is doing with and for the child. Because the itinerant teacher is not available all day and because communication fails, the special teacher

may not be aware of a problem until it is major and critical. The itinerant teacher spends a great deal of time traveling and not teaching or rendering professional service. She may feel at times that she is little more than a delivery service bringing a map here or an arithmetic book there. She feels, too, that she is an outsider or visitor in each of the schools and not an integral member of the faculty.

All five types of program and combinations of some of them can be found throughout the country. Even the oldest form, the residential school, continues to offer service. In the foreseeable future, we shall continue needing residential schools and do not anticipate withdrawing this type of program. Actually, the residential school may be accepting more and more multi-impaired blind children who might not fit easily into other programs; a program designed specifically for the multi-impaired blind child can more realistically meet the child's peculiar needs when in a residential setting, perhaps, than in a public school day program.

If <u>you</u> encounter a blind child in your community and he is not enrolled in any school, what is <u>your</u> responsibility to him? If your own administrator and those on his staff are not familiar with services available to this child, you might suggest that the director of public instruction on the state level be contacted in order to learn from him what might be recommended in this case. In the department of public instruction on the state level there may be an individual responsible for special education. He should know where the residential school is located and which towns have classes or services for the visually disabled child.

You might wonder, too, who pays the special teacher or who finances the educational program for blind children. Most residential schools are public, tax-supported schools. Some residential schools are admin-

istered by the state department of public instruction. Others fall within the state department of institutions along with prisons, state hospitals, and child welfare boards.

Public school day programs may be financed partially or wholly by the local school district. For instance, if Big City has a resource room, Big City may pay the entire salary of the resource room teacher. Districts sending children to this program would pay the receiving district. In some cases, several school districts employ the same teacher and contribute to her total salary, i.e. New York State. In some instances, a state agency such as a commission for the blind provides the itinerant teacher, pays her salary, and sends her into the school districts where there is a blind child with no charge to either the child's family or the child's school district. New Jersey uses this approach in great measure. The state department of special education may contribute to the local school district, sharing the cost of maintaining a program or employing the teacher.

In summary, a given state may have a residential school and various types of day programs simultaneously. Some states have a residential school and virtually no day program. Others, like New Jersey, have no residential school but day programs; when a residential school is needed for a specific child, the child is enrolled in one outside his state boundaries. Where more than one type of program is available within a given state, a given child might be enrolled in several of them in sequence throughout his educational years. For instance, he might begin in a residential school. When he is ready for fourth grade, he is transferred to a resource room. His secondary school years are spent in a public high school where he is serviced by an itinerant teacher. Any

sequence and/or combination is possible when several types exist concurrently. The child's individual needs should be considered first so that the best arrangement for HIM can be made.

Factors Affecting Program Development

Many factors affect program development in addition to the needs of the children. There are, however, some factors which are particularly significant to the development of a complete program. They include incidence, prevalence and location of pupils, size of school district, and location of school district.

The incidence of visually disabled children has always been relatively low. Now that the retrolental fibroplasia (RLF) children are in the secondary schools, we may see a slight decrease in the prevalence of those who will be classified as blind. Another condition, rubella (measles during the first trimester of pregnency) may bring about an increase of multi-handicapped children.

The number of children being served by the special teacher will vary according to the geographical location of schools, type of visually disabled children, distance between schools, and the child's educational level, along with the type of program currently serving the needs of the child.

Eligibility and Placement Practices

Standards of eligibility will vary from state to state according to state law. The appropriate state director of special education should be consulted for more detailed information. Consideration must be given to those children who deviate from the normal and are incapable of being

educated profitably and effectively through ordinary class instruction or without special assistance. Determination of eligibility with respect to age would also be included in state regulations. Generally, an eye specialist's report must be made in order to provide services. The child's mental abilities should also be assessed.

In considering placement of a child, the following factors must be considered:

a. Nature and extent of eye condition (including prognosis)
b. Academic progress
c. Developmental history
d. Scholastic aptitude
e. Presence of additional handicaps
f. Emotional stability
g. Age
h. Advice of others, etc. (regular teachers, medical personel, social worker, etc.)

GUIDE TO THE SELECTION OF MATERIALS TO BE USED WITH THE VISUALLY DISABLED

The utilization of local school facilities in the education of visually disabled children has presented an almost formidable barrier to teachers and administrators of visually disabled children. The problem of providing the visually disabled child with exact materials being used by his sighted classmates is one of our greatest challenges. It is essential that the visually disabled child have identical textbooks and other materials which are being used by his classmates. Even after administrators and teachers have realized the value of an integrated education, the question of available sources of supply of equivalent study tools cannot as yet be fully answered. The challenge can be met only through the combined efforts and skills of professional and volunteer workers. The teacher, a highly skilled professional, often spends a disproportionate amount of time on the acquisition and preparation of special materials to be used. It is hopeful that the following guide will be of value to the teacher and administrator who is faced with the challenge of providing these materials.

A. Acquisition of Braille Materials

A far greater number of sources of braille materials exist today than fifteen or twenty years ago. The trend toward day school education has by necessity involved a high number of specially trained and highly skilled braille transcribers. Volunteer braille transcribers will be discussed in detail later. The selection of specific texts has been complicated by the fact that study materials vary from state to state and

school district to school district. Also, last minute changes in textbook adaptation may be essential if a school district or individual teacher is to provide the best possible education services.

Because of the number of braille materials needed and the wide geographic distribution of braille book users, it is suggested that one of the following catalogs be consulted. The first step is to check a catalog or submit a request to a clearing house or union catalog.

The most extensive is the General Catalog of Braille Publications offered by the American Printing House for the Blind. The National Braille Association published a catalog of its NBA Braille Book Bank. The Book Bank provides copies of college-level and professional literature in braille.

If materials needed are not listed in one of the catalogs, the clearing houses and union catalogs should be checked. The clearing houses and union catalogs serve two main purposes: first, they avoid needless duplication; secondly, they serve as information centers. The following will serve as an example.

A teacher is in need of a particular braille text. She consults catalogs listing braille books and finds that the material is not available from these sources in the form desired. The teacher should then inquire from the Instructional Materials Reference Center at the American Printing House, by letter or postcard, whether it is available elsewhere, specifying exact title, author, publisher, copyright date, and the media in which the book is desired. If the book is available, the teacher then contacts the appropriate owners and makes arrangements to obtain a copy, either by purchase, by loan, or by vacuum formed duplication. If the book is not available, the teacher may attempt to have it transcribed by

a volunteer braillist. Before braille transcription is begun, an intention report should be submitted on forms which are available on request from the Instructional Materials Reference Center, American Printing House for the Blind. An intention card is placed on file at the Printing House , and remains a part of their records until a Completion Report is filed. Upon completion the report should be submitted so current information may be available to others who may be in need of the same material. There are three major central information sources for braille books:

1. Central Catalog of Volunteer Produced Textbooks - American Printing House. This is the union catalog of all textbooks that have been transcribed into braille, large type, disc and tape recorded form.

2. Union Catalog of Hand-Copied Books - Library of Congress, Division for the Blind and Physically Handicapped. This union catalog has listed only library books and general reading; no textbooks are included.

3. Central Index of Catholic Textbooks - Xavier Society for the Blind. The index lists braille textbooks used in diocesan school systems throughout the country.

4. College Level Textbooks - NBA Book Bank, 85 Godwin Avenue, Midland Park, New Jersey.

Several states are now in the process or have developed state and regional registry-depositories. The state of Illinois has recently developed a model state depository. They have established a state-wide lending library of materials to be used by the visually disabled. Local school districts inventoried the existing materials for the state-wide central card catalog, and put items not currently in use on loan with the center. It is advisable that every effort be made to obtain materials at the local or regional level before attempting to acquire materials from other sources. For example, it may be advisable to consult the larger school districts with existing programs when in need of materials, or

the local state department of education.

How Materials May be Obtained From the American Printing House Quota Accounts

The American Printing House for the Blind is a private organization which has been designated as the official source for braille and large type textbooks and materials to be supplied under the aid-to-blind school children quota of the United States Government. The founding purpose of the APH was to provide a central, national printing house which would supply books and apparatus to schools serving blind children.

The distribution of materials prepared by the APH is made through quota allocations. The allocations are determined on a per capita basis computed by dividing the total registrations of blind pupils being educated in public schools or schools for the blind as of the first Monday of January of each year into the total appropriation for that year. For bookkeeping purposes, allotments are set up each July 1, in the form of credit to the school for the blind or the state department of education.

Upon completion of the annual census, the local school district is informed by the state department of education of their district's share, based on the per capita number of students. Quota order forms are supplied upon request by the state department for special education. To requisition the materials, the public school should send their orders on the APH order blank in duplicate to their state department of education which in turn approves the orders and sends one copy to the Printing House. Upon receipt of orders, the Printing House will direct shipment to the school systems.

Procedure for Ordering APH Catalogs

To order APH catalogs request order forms from the State Department of Education or APH.

Making Out Orders

1. Orders should be typed on the regulation quota order blanks. If to be charged to local funds, use local numbered order blanks.

2. All orders should be typed, double spaced, and each different type of book or item (viz. braille, large type, music, talking books, educational aids, etc.) should be written on separate sheets.

3. In writing orders, fill in various columns on the quota order blank as indicated, including catalog number of each item. Do not include prices, as all prices in catalog are subject to change.

Shipment of Orders

1. All orders are to be filled in order of receipt. This means that every school must make arrangements for the acceptance of orders during the summer months.

2. In those cases where quota accounts are exhausted, and there are no local funds to pay for materials to be shipped prior to July 1, materials in stock when orders are received will be reserved for prompt shipment early in July.

3. The prices listed in most APH catalogs do not include shipping costs. (There are exceptions in the Tangible Apparatus Catalog.) Present postal regulations provide for free postage plus insurance on most of these items.

4. It is strongly recommended that orders should be received at the Printing House no later than June 1st, if they are to be shipped by August 15th, in time for receipt by school opening.

MAJOR BRAILLE PRESSES*

American Printing House for the Blind
1839 Frankfort Avenue
Louisville, Kentucky 40206

Braille Institute of America
741 North Vermont Avenue
Los Angeles, California 90026

Clovernook Printing House for the Blind
700 Hamilton Avenue
Cincinnati, Ohio 45231

Howe Press of Perkins School for the Blind
175 North Beacon Street
Watertown, Massachusetts 02172

MAJOR BRAILLE PUBLISHERS

American Bible Society
450 Park Avenue
New York, New York 10022

Braille Circulation Library
2823 West Grace Street
Richmond, Virginia 23221

Braille Evangel, Inc.
Post Office Box 6999
Fort Worth, Texas 76115

Braille Technical Press
984 Waring Avenue
New York, New York 10069

Christian Record Braille Foundation
444 South 52nd Street
Lincoln, Nebraska 68506

Canadian National Institute for the Blind
929 Beyview Avenue
Toronto, Ontario, Canada

Christian Science Publishing Society
1 Norway Street
Boston, Massachusetts 02115

Church of Jesus Christ of the Latter Day Saints
47 East South Temple Street
Salt Lake City, Utah 84111

Gospel Association for the Blind
120-30 - 18th Avenue
College Point, New York 11356

Hadley School for the Blind, Inc.
700 Elm Street
Winnetka, Illinois 60093

Home Department of Executive Council
Protestant Episcopal Churches
815 Second Avenue
New York, New York 10017

Protestant Episcopal Church
New York, New York 10001

Jewish Braille Institute of America
48 East 74th Street
New York, New York 10021

John Milton Society
475 Riverside Drive
New York, New York 10027

Lutheran Braille Evangelism Association
1619 Portland Avenue
Minneapolis, Minnesota 55404

Lutheran Library for the Blind
3558 South Jefferson
St. Louis, Missouri 63118

*Major braille presses and publishers (Sources: Directory of Agencies Serving Blind Persons in the U.S., New York: AFB, 1969: Howard Haycraft, Books for the Blind, Library of Congress, Division for the Blind, 1962.)

Matilda Ziegler Publishing Company
for the Blind
Main Street
Monsey, New York 10952

National Braille Presses, Inc.
88 St. Stephen Street
Boston, Massachusetts 62115

National Council for the Blind
731 Williamson Street
Madison, Wisconsin 53703

New York Association for the Blind
111 East 59th Street
New York, New York 10022

Royal National Institute
224 Great Portland Street
London W. 1, England

Swedenborg Foundation, Inc.
150 Fifth Avenue, Room 406
New York, New York 10010

Theosophical Book Association for
the Blind, Inc.
Route 2, Box 5-A
Ojai, California 93023

Volunteer Services for the Blind,
Inc.
332 South 13th Street
Philadelphia, Pennsylvania 19107

Xavier Society for the Blind
154 East 23rd Street
New York, New York 10010

Volunteer Braille Transcribing

Every advantage should be taken of the APH and other agencies, but in order to fully meet the textbook needs of blind students, the unlimited resources of volunteer services must be used. Throughout the country there are hundreds of volunteer transcribers who have the ability and capacity to cope with textbook requirements of students. These individuals may do volunteer work, they may be a part of a small local group, or they may belong to one of the large volunteer groups in the nation. A free directory is available upon request listing volunteer braillists whose service might be available in your local community: Volunteers Who Produce Books, The Library of Congress, 1965.

A braillist must be certified by either the Library of Congress or by an organization authorized to grant certification. To become a braillist is an arduous task and takes many long hours of instruction. Instruction may be given by the local special teacher, programmed mate-

rials, local transcribing groups, or by special correspondence with the Library of Congress.

It is believed that every school district which has a program for visually disabled children should have the services of volunteer transcribers. Some districts have had success with hiring paid transcribers; thereby eliminating problems imposed by additional responsibilities of the volunteer workers.

To insure that the volunteer service program functions with maximum efficiency, educators must assume the responsibility of anticipating textbook needs far in advance. The key to a successful program for the visually disabled is centered in planning far in advance. Anticipating textbook needs and having the material transcribed so that the student will have the materials on time is essential.

Volunteers rightly deserve this consideration and cooperation. With proper guidance, they can provide the solution to the problem of adequate textbook supply.

B. Acquisition of Large Type Materials

There has been a recent revolution in the availability of large type materials. Prior to 1965, teachers of visually handicapped had only a few sources for the acquisition of large type materials. Today, we have many sources.

LARGE TYPE PUBLISHERS

The following publishers have catalogs which teachers may request. Most of their books are photographically enlarged to 18 point type, 8 1/2 x 11 inch format, on off-white or light buff colored paper, usually of heavy stock, about 50 lbs. weight. Variations occur in line width, spacing, width of margins and binding.

Albert Whitman Company
560 West Lake Street
Chicago, Illinois 60606
Secondary, recreational.

American Bible Society
450 Park Avenue
New York, New York 10022
Some portions of the Bible in large type.

American Education Publications
Education Center
Columbus, Ohio 43216
Know Your World, A My Weekly Reader Publication.

Charles Scribner Large Type Editions
597 Fifth Avenue
New York, New York 10017
Recreational.

Children's Press, Inc.
Jackson Boulevard & Racine Avenue
Chicago, Illinois 60607
Type sizes ranging from 10-point to 30-point.

Christian Record Braille Foundation, Inc.
4444 South 52nd Street
Lincoln, Nebraska 68516
Newspapers and magazines.

Crane Duplicating Service
Barnstable, Massachusetts 02630
Textbooks, recreational.

Dodd, Mead and Company
79 Madison Avenue
New York, New York 10016
Special publications (daily devotionals).

Guild for Large Print Books, Inc.
211 East 43rd Street
New York, New York 10017
Recreational.

Harper and Row
49 East 33rd Street
New York, New York 10016
Publications of the Harper Crest large type editions began in 1966.

Keith Jennison Books
575 Lexington Avenue
New York, New York 10022
In May of 1967, this firm published its 100th title.

Large Print Publication
11060 Fruitland Drive
North Hollywood, California 91604
Four titles and a book of crossword puzzles are available.

J. B. Lippincott Company
East Washington Square
Philadelphia, Pennsylvania 19105
Limited, recreational; secondary and elementary.

The MacMillan Company
866 Third Avenue
New York, New York 10022
MacMillan has marketed titles including Jack London's Sea Wolf and Margaret Mitchell's Gone With The Wind (2 volumes).

Random House, Inc.
457 Madison Avenue
New York, New York 10022
Recreational, secondary.

Ulverscroft Large Print Books
Oscar B. Stiskin
23 Locust Lane
Stamford, Connecticut 10453
Nearly 200 titles in newly set type are available at $4 each to libraries, hospitals, and institutions.

Walker and Company
720 Fifth Avenue
New York, New York 10019
Recreational.

Webster Division, McGraw-Hill Book Company
Manchester Road
Manchester, Missouri 63011
Basic Goals in Spelling, Grades 2 through 8, soft and hard cover.

Viking Press, Inc.
625 Madison Avenue
New York, New York 10022
Recreational, 18-point.

MICROFILM DUPLICATION AND ENLARGEMENT SERVICES

Several commercial microfilm firms will supply a single or multiple copies of books in a wide variety of sizes of type enlargement. This is an expensive service, with prices varying. The price is lower if the book requested has already been filmed by the company and is listed in its catalog. One can also send a book to a microfilm company for filming and enlargement, in which case the company will usually make any necessary arrangements with the publishers for permission to reproduce.

Working from the microfilm, the pages are produced on Xerox Copyflo equipment, which limits the page width to a maximum of eleven inches. Halftones or solid tones do not reproduce particularly well, since Xerox is essentially a line copying process, but graphs and drawings reproduce well.

Catalogs may be requested from the following companies:

Bell and Howell Company
Micro Photo Division
Duopage Department
1700 Shaw Avenue
Cleveland, Ohio 44112

Dakota Microfilm Company
501 North Dales Street
St. Paul, Minnesota 55103

Microfilm Company of California
Library Reproduction Service
1977 South Los Angeles Street
Los Angeles, California 90011

Volunteer Transcribing Services
617 Oregon Avenue
San Mateo, California 94402

Xerox Corporation
Post Office Box 33
Grand Central Station
New York, New York 10017

Microfilm Business Systems Company
5810 West Adams Boulevard
Los Angeles, California 90016

University Microfilms, Inc.
Enlarged Editions Service
313 North First Street
Ann Arbor, Michigan 48107

Economy Blueprint and Supply Company
123 South La Brea Avenue
Los Angeles, California 90036

LARGE TYPE PERIODICALS

New York Times Large Type Weekly
Available from the New York Times
235 West 43rd Street
New York, New York 10036
$29 per year (52 issues)

Readers Digest Large Type Edition
Available from the Xerox Corporation
$48.60 per year; $25.65 for six months; $4.50 per copy

LARGE TYPE DICTIONARIES

Merriam Webster's Seventh New Collegiate Dictionary
Available from Microfilm Company of California
$135. 4 volumes

Thorndike-Barnhart Junior Dictionary
Available from the American Printing House for the Blind
$114.90

Winston Dictionary for Schools
Available from Stanwix House
$38

Grolier Large Type Dictionary
Available from Keith Jennison Books
$12.50

VOLUNTEERS

Volunteers Who Produce Books for Blind and Visually Impaired Individuals.
Available free on request from the Division for the Blind and Physically Handicapped, Library of Congress, Washington, D. C. 20542.

C. RECORDED MATERIALS

A changing and expanding role is being played by recorded materials in the education of the visually limited individual. No longer is the "record player" turned to for amusement time only or as a reward for having learned to braille or type an assignment! As a partner in a multi-sensory approach, as an ancillary aid for the multi-handicapped; whether as an expediency for some, or as a necessity for others, recorded material has arrived on the education scene.

Teachers of the visually limited are obligated to take full advantage of the valuable service made available from the Library of Congress through its Regional Libraries.

TALKING BOOK

The Talking Book is the name for the special long playing phonograph record. Each record has the page number and title marked in braille as well as in ink. A Talking Book is played on a Talking Book machine or approved record player. Talking book machines and reading materials are available on loan without charge to residents of the United States. These materials are also available for loan to institutions, for the use by eligible persons.

Eligibility -

In July, 1966, an important change took place in services to handicapped individuals. Prior to 1966, the Library of Congress, Division for the Blind, Washington, D. C., provided reading materials to visually handicapped persons. The Library of Congress, Division for the Blind and Physically Handicapped now provides materials to individuals who cannot read by regular means, that is, who cannot profit from conventional reading procedures.

Application (see appendix F) for loan of a talking book machine should be made to The Library of Congress, Division for the Blind and Physically Handicapped, Washington, D. C. or to the appropriate local regional branch of the Library of Congress. The application should be accompanied by a brief statement describing the physical disability and certifying eligibility from a competent authority. In case of total blindness a statement signed by a responsible member of the community is acceptable. The agency will send a machine and forward a registration card to the appropriate regional library, which will circulate talking book recordings to the reader. Talking book records may be obtained

from the following sources:

STATE	TALKING BOOK MACHINES	LIBRARY SERVICES
Alabama	Same as regional library	Regional Library for the Blind and Physically Handicapped 525 North Court Street Talladega, Alabama 35160 AC 205-362-9053
Alaska	Same as regional library	Library for the Blind and Physically Handicapped Seattle Public Library 425 Harvard Avenue, East Seattle, Washington 98102 AC 206-324-0201
Arizona	Division of Rehabilitation for the Visually Impaired State Office Building 112 North Central Avenue Phoenix, Arizona 85007 AC 602-271-4354	Arizona Regional Library for the Blind and Physically Handicapped 1016 North 32nd Street Phoenix, Arizona 85008
Arkansas Circulates Talking Book's only	Rehabilitation Services for the Blind 106 South State Street Little Rock, Arkansas 72201 AC 501-375-7245	Library for the Blind and Physically Handicapped 311 Capitol Street Little Rock, Arkansas 72201
California 1. Northern Monterey, Kings, Tulare and Inyo Counties and north	Orientation Center for the Blind 400 Adams Street Albany, California 94706 AC 415-527-0227	Books for the Blind and Physically Handicapped Section The California State Library Post Office Box 2037 Sacramento, California 95809 AC 916-445-4552
2. Southern San Luis Obispo, Kern and San Bernardino Counties and south	Same as regional library	Braille Institute of America 741 North Vermont Avenue Los Angeles, California 90029 AC 312-663-1111, Ext. 32

Colorado	Colorado State Library 1140 Delaware Denver, Colorado 80204 AC 303-534-2263	Services to the Handicapped Colorado State Library 1332 Lincoln Street Denver, Colorado 80203 AC 303-934-0930
Connecticut	Same as regional library	Library Services for the Physically Handicapped Connecticut State Library 90 Washington Street Hartford, Connecticut 06106
Delaware	Delaware Commission for the Blind 305 West 8th Street Wilmington, Delaware 19801 AC 302-655-4444	Library for the Blind and Physically Handicapped Free Library of Philadelphia 1700 Spring Garden Street Philadelphia, Pennsylvania 19130 AC 215-563-5433
District of Columbia	Columbia Lighthouse for the Blind 2021 - 14th Street, N. W. Washington, D. C. 20009 AC 202-265-6290	Division for the Blind and Physically Handicapped Attn: National Collections Library of Congress Washington, D. C. 20542 AC 202-882-5500
Florida	Same as regional library	Library for the Blind and Physically Handicapped Post Office Box 2299 Daytona Beach, Florida 32015 AC 904-252-0070
Georgia	Same as regional library	Library for the Blind and Physically Handicapped Department of Education 1050 Murphy Avenue, S. W. Atlanta, Georgia 30310 AC 404-753-5607
Hawaii	Services for the Blind 1901 Bachelot Street Honolulu, Hawaii 96817 507711, Ext. 757	Library for the Blind and Physically Handicapped 402 Kapahulu Avenue Honolulu, Hawaii 96815 79-888
Idaho	Commission for the Blind Sixth and State Streets Boise, Idaho 83701	Division of the Blind and Physically Handicapped Utah State Library 2150 South Second, West Salt Lake City, Utah 84115

Illinois	Community Services for the Visually Handicapped Room 1713 160 North LaSalle Street Chicago, Illinois 60601 AC 312-346-2000	Services for the Blind and Physically Handicapped Chicago Public Library 4544 North Lincoln Avenue Chicago, Illinois 60625 AC 312-561-7210
Indiana	Indiana Agency for the Blind 536 West 30th Street Indianapolis, Indiana 46223 AC 317-923-3363	Division for the Physically Handicapped Indiana State Library 140 North Senate Avenue Indianapolis, Indiana 46204 AC 317-633-5404
Iowa	Same as regional library	Library for the Blind Fourth and Keosauqua Streets Des Moines, Iowa 50309 AC 515-283-0153
Kansas	Division of Services for the Blind State Office Building Topeka, Kansas 66612 AC 913-235-0011, Ext. 703	Wolfner Library for the Blind and Physically Handicapped 3844 Olive Street St. Louis, Missouri 63108 AC 314-533-0352
Kentucky	Kentucky Industries for the Blind 1900 Brownsboro Road Louisville, Kentucky 40206 AC 502-897-5371	Library for the Blind and Physically Handicapped Post Office Box 818 Frankfort, Kentucky 40601
Louisiana	Division for the Blind Post Office Box 4065 Baton Rouge, Louisiana 70804 AC 504-342-4781, Ext. 333	Department for the Blind and Physically Handicapped Louisiana State Library Post Office Box 131 Baton Rouge, Louisiana 70821 AC 504-342-5681, Ext. 363
Maine	Division of Eye Care and Special Services State House Augusta, Maine 04330 AC 207-623-4511, Ext. 548	The Regional Library Perkins School for the Blind 175 North Beacon Street Watertown, Massachusetts 02172 AC 617-924-3434, Ext. 31
Maryland	Maryland Workshop for the Blind 2901 Strickland Street Baltimore, Maryland 21223 AC 301-233-4567	State Library for Physically Handicapped 1715 North Charles Street Baltimore, Maryland 21201

Massachusetts	Commission for the Blind 237 Putnam Avenue Cambridge, Massachusetts 02139 AC 617-547-5754	The Regional Library Perkins School for the Blind 175 North Beacon Street Watertown, Massachusetts 02172 AC 617-924-3434, Ext. 31
Michigan 1. Wayne County	Same as regional library	Department for the Blind and Physically Handicapped Wayne County Library 33030 Van Born Road Wayne, Michigan 48184 AC 313-722-8000
2. Entire State (except for Wayne County)	Same as regional library	Michigan State Library for the Blind and Physically Handicapped 735 East Michigan Avenue Lansing, Michigan 48913 AC 517-373-1591
Minnesota	Services for the Blind 555 Wabasha St. Paul, Minnesota 55102 AC 612-221-2691	Library for the Blind and Physically Handicapped Minnesota Braille and Sight Saving School Faribault, Minnesota 55021 AC 507-334-6411, Ext. 279
Mississippi	Vocational Rehabilitation for the Blind 528 North State Street Jackson, Mississippi 39205 AC 601-355-9361, Ext. 600	Library for the Blind and Physically Handicapped Mart 51, Terry Road Jackson, Mississippi 39204
Missouri	Same as regional library	Wolfner Memorial Library for the Blind and Physically Handicapped 3844 Olive Street St. Louis, Missouri 63108 AC 314-533-0352
Montana	Same as regional library	Division for the Blind and Physically Handicapped Montana State Library 930 East Lyndale Avenue Helena, Montana 59601 AC 406-442-3260

Nebraska	Services for the Visually Impaired State Capitol Building Lincoln, Nebraska 68509 AC 402-477-5211, Ext. 508	Library for the Blind and Physically Handicapped Nebraska Public Library Commission State Capitol Lincoln, Nebraska 68509 AC 402-477-5211
Nevada	Services to the Blind Division 311 North Curry Street Room 113 Carson City, Nevada 89701 AC 702-992-7412	Regional Library for the Blind and Physically Handicapped Nevada State Library 2351 Arrowhead Drive Carson City, Nevada 89701
New Hampshire	Division of Blind Services 64 North Main Street Concord, New Hampshire 03301 AC 603-225-6611, Ext. 490	New Hampshire State Library Library Service to Handicapped Division 12 Hills Avenue Concord, New Hampshire 03301
New Jersey	Commission for the Blind 1100 Raymond Boulevard Newark, New Jersey 07102 AC 201-648-3333	Library for the Blind and Handicapped 1700 Calhoun Street Trenton, New Jersey 08638 AC 609-292-6450
New Mexico	Services for the Blind Post Office Box 2348 Santa Fe, New Mexico 87501 AC 508-983-6305, Ext. 214	Services to the Blind and Physically Handicapped New Mexico State Library Post Office Box 1629 Santa Fe, New Mexico 87501 AC 505-827-2103
New York 1. New York City and Long Island	Same as regional library	Library for the Blind and Physically Handicapped The New York Public Library 166 Avenue of the Americas New York, New York 10013 AC 212-925-1011
2. New York State	Same as regional library	Library for the Blind and Physically Handicapped New York State Library 226 Elm Street Albany, New York 12202 AC 518-474-5935
North Carolina	Commission for the Blind Post Office Box 2658 Raleigh, North Carolina 27602 AC 919-829-7535	Regional Library for the Blind and Handicapped North Carolina State Library 1314 Dale Street Raleigh, North Carolina 27605 AC 919-829-7228

North Dakota	Special Services for the Partially Seeing University Station Box 8117 Grand Forks, North Dakota 58201 AC 701-777-2604	Library for the Blind and Physically Handicapped Minnesota Braille and Sight Saving School Faribault, Minnesota 55021 AC 507-334-6411, Ext. 279
Ohio 1. Northern including Columbus	Bureau of Services for the Blind 85 South Washington Avenue Columbus, Ohio 43215 AC 614-469-4272	Braille and Talking Book Service Cleveland Public Library 325 Superior Avenue Cleveland, Ohio 44114 AC 216-241-6647
2. Southern South of Columbus	Same as above	Library for the Blind and Physically Handicapped Public Library of Cincinnati and Hamilton County 444 West Third Street Cincinnati, Ohio 45202
Oklahoma	Division of Visual Services Post Office Box 25352 Oklahoma City, Oklahoma 73105	Oklahoma Library for the Blind and Physically Handicapped 1108 N. E. 36th Street Oklahoma City, Oklahoma 73111 AC 405-427-0633
Oregon	Commission for the Blind 535 S. E. 12th Avenue Portland, Oregon 97214 AC 503-234-6441	Oregon State Library Division for the Blind and Physically Handicapped 432 Church Street, S. E. Salem, Oregon 97301
Pennsylvania 1. Eastern Bradford, Lycoming Northumberland Juniata, Perry Cumberland York Counties and east	Bureau of the Visually and Physically Handicapped Post Office Box 2675 Harrisburg, Pennsylvania 17120 AC 717-787-3624	Library for the Blind and Physically Handicapped Free Library of Philadelphia 1700 Spring Garden Street Philadelphia, Pennsylvania 19130 AC 215-563-5433

Pennsylvania 2. Western Tioga, Clinton Union, Snyder, Mifflin, Huntingdon, Franklin, Adams Counties, and west	Bureau of the Visually and Physically Handicapped Post Office Box 2675 Harrisburg, Pennsylvania 17120 AC 717-787-3624	Library for the Blind and Physically Handicapped Carnegie Library of Pittsburgh 4724 Baum Boulevard Pittsburgh, Pennsylvania 15213 AC 412-321-0111
Rhode Island	Division of Services for the Blind 46 Aborn Street Providence, Rhode Island 02903 AC 401-861-7950	Library for the Blind and Physically Handicapped Department of State Library Services 95 Davis Street Providence, Rhode Island 02908 AC 401-521-7100, Ext. 726
South Carolina	Commission for the Blind 1400 Main Street Columbia, South Carolina 29201 AC 803-758-2802	Regional Library for the Blind and Physically Handicapped North Carolina State Library 1314 Dale Street Raleigh, North Carolina 27605 AC 919-829-7228
South Dakota	Service to the Blind and Visually Handicapped 222 East Capitol Avenue Pierre, South Dakota 57501 AC 605-224-5911, Ext. 318	State Library Commission Library for the Blind and Physically Handicapped 701 East Sioux Street Pierre, South Dakota 57501
Tennessee	Services for the Blind 303 State Office Building Nashville, Tennessee 37219 AC 615-741-3163	Tennessee Regional Library for the Blind and Physically Handicapped 5200 Centennial Boulevard Nashville, Tennessee 37209
Texas	Commission for the Blind 1809 North Congress Austin, Texas 78701 AC 512-475-2946	Division for the Blind and Physically Handicapped Texas State Library Drawer DD, Capitol Station Austin, Texas 78711 AC 512-475-2619

Utah	Services for the Visually Handicapped 309 East First, South Salt Lake City, Utah 84111 AC 801-328-5591	Division for the Blind and Physically Handicapped Utah State Library 2150 South Second, West Salt Lake City, Utah 84115 AC 801-328-5855
Vermont	Division for the Blind and Visually Handicapped 128 State Street Montpelier, Vermont 05602 AC 802-223-2311, Ext. 581	Library for the Blind and Physically Handicapped New York State Library 226 Elm Street Albany, New York 12202 AC 518-474-5935
Virgin Islands	Same as regional library	Division of Libraries and Museums Department of Education Post Office Box 390 Charlotte Amalie St. Thomas, Virgin Islands 00801
Virginia	Virginia Commission for the Visually Handicapped 3003 Parkwood Avenue Richmond, Virginia 23221 AC 703-770-2181	Virginia State Library for the Blind and Physically Handicapped 3003 Parkwood Avenue Richmond, Virginia 23221 AC 703-770-2181
Washington	Same as regional library	Library for the Blind and Physically Handicapped Seattle Public Library 425 Harvard Avenue, East Seattle, Washington 98102 AC 206-324-0201
West Virginia	Department of Welfare Division of Medical Care Charleston, West Virginia 25305 AC 304-343-4411, Ext. 2404	Library for the Blind and Physically Handicapped Carnegie Library of Pittsburgh 4724 Baum Boulevard Pittsburgh, Pennsylvania 15213 AC 412-321-0111
Wisconsin	Services to the Blind 5316 West State Street Milwaukee, Wisconsin 53208 AC 414-771-5311	Library for the Blind and Physically Handicapped Milwaukee Public Library 814 West Wisconsin Milwaukee, Wisconsin 53233 AC 414-276-7578

Wyoming	Services for the Visually Handicapped Capitol Building Cheyenne, Wyoming 82001 AC 307-634-2711, Ext. 294	Division for the Blind and Physically Handicapped Utah State Library 2150 South Second, West Salt Lake City, Utah 84115 Ac 801-228-5855
Territory and Possessions:		
Guam	Services for the Blind 1901 Bachelot Street Honolulu, Hawaii 96817 507711, Ext. 757	Library for the Blind and Physically Handicapped 402 Kapahulu Avenue Honolulu, Hawaii 96815 79-888
Puerto Rico	Institute for Blind Children Box 8622 Santurce, Puerto Rico 00910 724-0893	National Collections Division for the Blind and Physically Handicapped Library of Congress Washington, D. C. 20542 AC 202-882-5500

All other territories or possessions receive service from:

Division for the Blind and Physically Handicapped
Library of Congress
Washington, D. C. 20542

Books include everything from recent novels, humor, handcraft and cookbooks to the classics, biography and science. This is a completely free service; there are no fees no matter where the person lives. He does not have to pay for postage and there are no charges for overdue, lost or damaged books.

The Talking Book may be used by the handicapped of all ages. The school age child may use it to supplement his braille reading because it permits increased reading speed which is particularly important for substantial assignments at the secondary level. It may be used for recreational reading as well.

For further information concerning talking books, write the Library of Congress or your regional library.

TAPE RECORDINGS

Similar materials are available which are recorded on magnetic tape, and can be borrowed under the same arrangements as discs. Tape players, however, are not supplied by the library. Catalogs listing tapes are available from the same source.

D. DIRECT READER SERVICE

Many materials may not be available in other media, which will make necessary direct, face-to-face human reader service. A visually disabled student may not find a highly technical science text available in the form of braille, talking books, tapes, etc. Most often this mode of reading will be utilized by junior and senior high school students as opposed to elementary aged children.

A reader may be needed for incidental materials such as: catalogs, references, or library studies, periodicals, etc. The following is a general outline which may be used for a guide to operational procedure:

1. Have the reader go through the table of contents so that a general idea and organization may be developed by the student.
2. Read main section headings within the chapter so that the student may have an overview of the chapter.
3. Read new sections with emphasis or declaration of same.
4. Read fine print, footnotes, graphs, etc.
5. Student may employ a tape recorder while having material read, so that he may re-read.
6. Student may also employ a braille writer to take specific notes.
7. Spell unfamiliar words and/or dialect.

QUALIFICATIONS OF A READER

1. What's the reader's purpose? Social, emotional, or are they sincerely interested in rendering a service.
2. The reader must be dependable.
3. Voice must be clear and agreeable. It must be intelligible without effort on his part and can be listened to for long periods of time without tiring.
4. Speed; 165 words per minute. Of course, this will depend upon the material, and preference of the listener.
5. The delivery should be natural and even-flowing.
6. A high school or college classmate may be a most acceptable reader if they fulfill the above qualifications.

For a more detailed description of direct reader service, see Tape Recording Books for the Blind by Arthur Helms; American Foundation for the Blind.

E. EDUCATIONAL AIDS

The special teacher of the visually disadvantaged student, perhaps for longer than teachers in other areas of exceptionality, has known the need for bridging the gap between the individual child's need for a special aid and supplying that aid when and where it was needed. Constantly searching of sources and continuously planning ahead is a large part of every day's work. Taking advantage of new items as they appear in brochures and catalogs can cut to a minimum the so-called emergencies of one-student, one-shot needs. Awareness of the development for other areas of exceptionality materials which can serve visually impaired equally well is a must for the present day specialist.

There is no way to GIVE into the hands of the specialist a ready-made list to meet her needs. SOURCES are the answer. The use made of those sources pre-determines the educational aids the individual will have. In addition to the national and regional sources herein given, the teacher will find state, local and commercial publications useful.

Low vision aids, magnifiers, furniture, equipment, materials, special manuals and other aids for teaching and learning must be sought anew continuously because something else is always happening!

Among the most enduring SOURCES are those indicated here:

American Printing House for the Blind
1839 Frankfort Avenue
Louisville, Kentucky 40206

Tangible apparatus catalog. The Printing House in conjunction with the Instructional Materials Reference Center has developed a national clearing house of instructional materials to be used with the visually disabled child. It is recommended that teachers and administrators consult with the IMRC/APH when in need of a specific aid.

American Foundation for the Blind
15 West 16th Street
New York, New York 10011

The Directory of Agencie's Serving the Visually Handicapped in the United States should be available to each special teacher.

Howe Press of the Perkins School for the Blind
Watertown, Massachusetts 02172

TIPS FOR THE REGULAR CLASSROOM TEACHER*

When you learned there was to be a blind child in your class you probably wondered how you would be able to manage the situation and why the child was not being placed in a residential school for the blind

*Ysabel Johnson, A Blind Child Becomes a Member of Your Class (American Foundation for the Blind Publication: Educational Series, No. 14; New York, New York, June, 1961). (Reprinted with Permission)

children. A gradual development in educational philosophy has demonstrated that a blind child will benefit greatly from attending local public and private schools. One of the chief reasons for this development is the desire of parents to have their child at home where he can experience the warmth of family life and share in its realities. Through attendance at the neighborhood school the blind child develops and matures while sharing the same opportunities and challenges as his sighted schoolmates. Day by day living of sighted children with a blind child is one of the most effective means of breaking down misconceptions and prejudices about blindness.

Children and adults very quickly perceive the effectiveness with which a blind child, with a minimum of special attention, can take his place as a successful and contributing member of the school and community life. In addition, the costs alone of maintaining large residential schools point to the wisdom of the establishment of good educational facilities in local areas.

This section was written to help acquaint you, the classroom teacher, with the idea of integrating a blind child into your class.

Your responsibility to the visually handicapped child in your group is the same as your responsibility to other pupils. You help them to develop physically, socially, intellectually, and morally. A teacher must take every child where he is and lead him as far as the limitations and potentialities of both the child and teacher permit.

Try to remember that if you are a good teacher for sighted children you can also be a good teacher for a blind child. Teaching and learning processes are fundamentally the same. Some adaptations will be necessary

in methods and materials.

To help you with this aspect of having a blind child in your group, you will have the support not only of the administrator of the school program, but also of a resource teacher. This teacher may be located in your building, or in some instances an itinerant teacher will come to help you for certain scheduled hours each week. These specially prepared helpers will guide you and the visually handicapped child in the use of any special tools or techniques appropriate for his instruction.

The function of a resource teacher or the itinerant teacher is the same. The only difference is that the resource teacher has headquarters in a school where several blind children are enrolled, whereas the itinerant teacher serves different children placed in various schools within a certain area.

Examples of Ways in which the Resource Teacher or the Itinerant Teacher Will Help with Special Needs in Your Classroom

In fulfilling her responsibility to your class, the resource teacher or itinerant teacher may assist you with the blind child in your group in ways such as the ones listed below:

1. Supplying reading readiness help.
2. Providing in braille the necessary written and reading materials so that the blind child can follow your program.
3. Teaching the child how to find his way in the halls, on the stairs, to the restrooms, in the cafeteria, and on the playground. This type of help is sometimes referred to as teaching

skill in orientation and mobility, or mobility instruction.

4. Helping the child to learn how to use the playground equipment.
5. Suggesting indoor and outdoor games which the entire class can enjoy.
6. Helping to adapt lessons in arts and crafts.
7. Ocassionally going along on field trips to help the child learn as much as possible from touch, smell, hearing, and even taste.
8. Working out a convenient system so that materials can be prepared, organized, and located so they will be readily available for the blind child's use in your class.
9. Guiding you in learning to know as much as possible about this child. Gradually with this assistance you can piece together parts of his "biography of reactions." These are all the interactions of an individual with the world around him. Your resource or itinerant teacher is prepared to help you in interpreting these interactions in order that you can be most helpful and enjoy fully the blind student. Loving and patient efforts of an understanding person may undo in the future what unwise treatment has wrought in the past.
10. Keeping in touch with local, state, and national resources which can serve your program from time to time.

Since there is more than one way to solve a problem, no doubt you and the special teacher will be exploring new approaches. The classroom teacher and the resource teacher or itinerant teacher, through their varied experiences and training, are often challenged by novel ideas, and to develop them creatively with mutual gain for teachers as well as

children, both sighted and blind.

The resource or itinerant teacher will assist you in facing problems as they present themselves. The creative thinking, initiative, enthusiasm, and experience of the regular classroom teacher together with that of the specially trained teacher result in curriculum and methods of procedure specifically adapted to the needs of the blind child.

This special teacher is qualified to aid you to see problems in their true perspective, no more nor less serious than they actually are. Together, with her suggestions and the support of the administrator of your school program, you will be able to work them through with surprising satisfaction.

Regular Classroom Teachers
Who Have Had Experience
with Blind Children Say. . .

Do not panic! The handicapped child adapts surprisingly well to circumstances as they arise and is eager and able to do most of the same things as the sighted children when given the opportunity.

If you are natural and relaxed, the child will develop in a natural and relaxed way.

A pat on the head or a gentle arm around the shoulder says a great deal to a blind child.

Help the child feel that he belongs to the class; but give him no special privileges.

A blind child can learn that lack of sight does not absolve him from the need for discipline.

Allow the blind child the opportunities to grow in independence

just as you do other children. Before long the entire class will be talking about how proud they are of his developing skills.

The blind child may need special kinds of help. This is true of all children from the very slowest to the most gifted one.

Try to describe activities carefully and to be consistent in your directions since the blind child cannot see you. You will be happy to notice that your improved skill in giving directions and the children's attention to following oral directions will help the entire class.

Several teachers reported that often a child in the regular class who had many problems showed marked improvement in his own social adjustment after working voluntarily with the blind child. This advantage was shared by the entire class.

The standards of grading should be the same for the blind child as for other children. Too much emphasis can be placed on blindness of the child rather than upon his other normal abilities.

Help the blind child to experiences which will bring to him a generous share of feelings of security and understanding, from yourself as well as from his sighted classmates. If you believe in any child, he will respond to your confidence in him.

You may be making your finest advances when appearances are least in your favor. Periods of growth and regression and then further growth are typical of all learning and of all children.

One teacher reports that the most important thing learned was the fact that having a blind child in a regular class was much easier than she had expected.

To have a blind child is a fine experience for you and your children.

Relax and enjoy it.

Ways to Help a Blind Child Feel Comfortable and Adequate

In unfamiliar places a blind child is most at ease walking with a friend, placing his hand lightly on the other child's arm at the elbow.

Let a blind child follow your lead. Never push him from behind.

In becoming acquainted with his new classroom the blind child will find it helps to have a few points of orientation, such as the sink or the door, and sound cues.

Allow the blind child to explore and find things for himself. Placing his hand here and there does not give him a total and meaningful orientation to surroundings.

Many Children Have Some Sight

Vision is a process which must be learned. Teachers can help those with some sight, no matter how little, to see what they are capable of seeing. In some cases vision is increased as it is practiced. Unfortuanately, some individuals have vision of which they do not take advantage simply because they have not learned to use it.

Residual vision may be shown by <u>light perception</u>, <u>color perception</u>, or <u>object perception</u>. Many people have the misconception that if a person is blind he sees nothing at all. However, a legally blind person may still have some vision if he is taught how to use it. It is generally recognized that the use of whatever sight may remain does not impair or aggravate most eye conditions. It is interesting to note that many

legally blind individuals can and do use print as their means of reading.

The child with light perception may be taught to use whatever he can see to help him to get about more adequately, comfortably, and with more self-assurance.

The child with color perception may not be able to draw a picture in much detail. Yet he will probably enjoy working with bright colored paper, looking at colored pictures, or experimenting with paints and chalks at the easel.

Children with object perception should be encouraged to make maximum use of whatever sight they may have by giving them attractive materials, by providing comfortable lighting, and by initiating reasons for using that sight which the children understand. As in the case of a child with color perception, you might experiment in using kaleidoscopes, pictures of various sizes and colors, or colored paper.

Use of Color Words

Although we cannot know what concepts a blind person may have about the names of colors, we can help him develop a feeling and association about color words. Blind individuals are surrounded by people using color words. Although they cannot see the colors, they may develop an awareness of how others feel about colors and how color words are used.

Fire is red and hot

Water is blue and cool

Pink is feminine and soft

It is a good idea to compliment a blind child when he wears a color which is particularly suitable to him. He should learn to know the pleasure which a good appearance makes to himself and to his sighted companions.

Use of Mental Conceptions of Surroundings

Try to help the blind child to build a mental concept of his surroundings. This mental picture, however, need not necessarily be in our own visual terms, but in terms which are meaningful to the child. Sometimes he reveals how things appear to him by making models in clay. Art work may show which parts of a total impression are most important to him and which parts are less meaningful. The blind child, for example, may express himself in terms of how the touch of things appear to him. It would seem odd for him to speak of the reflection of moonlight on rippling water, whereas he might discuss the ripple of a pattern of brickwork on a garden wall.

A Sixth Sense

There are individuals who tend to believe that blind people have a sixth sense, providential compensation, or extraordinary talent. Usually a combination of hard work, the cultivation of a good memory, and the development of latent natural faculties permit some blind people to function very well. The "sixth sense" is a poetic phase having no foundation in truth.

The Use of Braille

All people have certain tools, such as printed books, which help them to learn and to communicate. Although blind children cannot see to use print they are most fortunate to have their own tool and method of communication which is known as braille.

Braille is adaptable for use in reading, writing, mathematics, music, foreign languages, and science. The classroom teacher need not

learn braille herself, but she should be able to interpret its function to the class. The resource teacher or itinerant teacher will instruct the blind child in the use of braille.

Some blind persons and even relatives of blind persons tend to avoid braille because of its association with lack of sight. As a teacher you can show respect for this tool and interpret it to the class as a very useful method of communication.

Show it off to all the children. Some sighted children enjoy it as a secret code.

All children like name tags on their desks; lockers, or coat hangers in print and braille.

Valentines signed by a blind child in braille are just a little special and always fun for the sighted children to show at home.

Braille labels and signs in the room attract the attention of all children. So do braille calendars, clock faces, rulers, scales, and thermometers.

Playground Activities

You and your resource or itinerant teacher will adapt many of the usual games by methods such as using sighted partners, following the sound of a bell, and clapping hands. In the lower grades there has been little difficulty including the blind child in the games.

Some of the upper grade physical education presents more of a challenge, since there will be certain activities which are not suitable for blind children. There are games such as basketball, tennis, and football in which they cannot enter for competition. However, they may partake of most games for fun. For instance, the blind child can join in various

ball games where the use of sound can enable the child to participate. It is important that he have a basic understanding of popular sports and understanding their terminology. Blind people do enjoy following the World Series, football games and other sports events on television and radio. This will be of social value in discussing sports, a frequent topic of conversation.

To appoint the blind child as score-keeper or equipment custodian does provide him with a mental exercise, but not with physical education. He may enjoy this activity, but should not feel that his physical education will be so restricted.

Try to determine the blind child's physical needs such as development of larger muscles, better balance, an even gait, ability to run and skip freely, and to correct posture. There will be sighted children who share some of the same needs, and these children may have their physical education together in such activities as using rings, trapeze, ladders, balancing boards, jungle gyms, and gym horses; and in doing tumbling, team stunts such as building pyramids and weight lifting. Although usually not possible on school grounds, bowling, swimming, roller skating, ice skating, and wrestling are favorable sports in which blind and sighted can participate together.

These are only suggestions of types of activities. The important thing is that the blind child is able to fulfill some of his own physical needs.

The Blind Child and His Schoolmates

Teachers about to have a blind child in class usually ask how to prepare the other children for the coming of this child. Let us remember

that each child and situation differs so that it is unwise to make general statements as to how to cover specific situations.

However, many teachers who have had experience in teaching blind and sighted children together feel it better to begin school by calling no attention to the fact that one of the children in class is blind anymore than she would point out that one child has red hair or a Swedish name. Later, however, should the blind child be absent or out of the room, she might hold a little discussion in which she guides the class to realize that although the blind child cannot see, he can participate in most activities. Many things will be difficult for him, but few will be impossible. The teacher can point out how the blind child achieves the same goals by using different means.

Children can easily be made to realize that we are all different. Some have difficulty with arithmetic, others in sports, some in reading or singing. There are children with a crippled leg, poor hearing or a weak heart. What is important is that each of us tries to do his best.

The teacher now has an opportunity to make positive use of an unfortunate situation by enabling the children to see for themselves that everyone is endowed with different gifts. It is best to be thankful for what we have and make the fullest use of our abilities.

All children can learn from their relationships with those who are handicapped. It is the able teacher who makes the presence of a blind child an advantage rather than a disadvantage as she works with her students throughout the year.

Keeping Children Active

All children must learn to make proper use of their time if they are going to satisfactorily increase their progress and development. Try to find avenues to keep the blind child active physically and mentally. A blind child has as much to learn, and the ability to learn as well and the same amount of curiosity as other children when he is given appropriate opportunities.

Encourage Exploration

Encourage the blind child to move about. He can develop his natural inclination to explore and to learn. Your guidance can nurture such inclinations.

Have interesting things about that will make a visually-handicapped child curious and wish to move about. These may include:

A science table

The week's cafeteria menu

Pets such as a turtle, hamster, or a mouse

A new braille book with an intriguing cover on the library table

Special notices on the bulletin board which change frequently

Blind children also like to share in classroom responsibilities and try things for themselves. they may contribute by:

helping put away equipment	emptying waste baskets
suggesting songs to sing	sharpening pencils
leading the flag salute	passing paper
making weather reports	going on errands
watering the plants	dusting

caring for pets

Much Learning Can Be Gained Through Play

Let children see a reason for doing things. Many times suggestions can be developed through games. Rather than having a young child stringing beads aimlessly, why not let him learn the parts of a percolator, make something with hammer and nails, construct a building with blocks, or even prepare a cake or some jello. Playing with dolls gives practice in dressing and using snaps, buttons, and zippers. Children enjoy paint, clay, water and sand--they like to take apart and put together.

This list of after-school activities of some blind children gives an idea of the range of interests these children pursue.

scouting	wrestling	roller skating
sewing	bicycling	French lessons
rowing	ice skating	neighborhood play
swimming	music lessons	horseback lessons
Brownies	Sunday School	radio transmission

Some communities have part-time work programs designed to assist older students find suitable employment.

When first teaching a blind child you may probably be more concerned about the fact that he cannot see than about anything else. At this time his blindness may be, to you, his most distinguishing characteristic.

In teaching your class and becoming acquainted with the ways of each child you will observe and try various methods and approaches. During the course of the school year you will have times when you will be discouraged, amused, saddened, or puzzled over apparent stand-stills, or cheered by sudden progress. Is this not true for all teachers of all

children?

As you live day by day with a blind child you will gradually come to feel that child development and the basic learning processes are the same for him as for all children. As you come to know this child better, the importance attributed to the fact that he cannot see will gradually lessen. You will come to see his other characteristics and know his individual personality. Then you will begin to realize that this is just another child who happens to be blind.

ORIENTATION AND MOBILITY

Written by Woodrow Schrotberger
Illustrations formulated by
James Brisnehan
Drawings by Linda Tetsell

The blind and partially sighted child is becoming an integral member of the public school population. His academic success has been progressively encouraging. However, he must possess adequate orientation and mobility skills in order to function well in society.

The teacher has the opportunity to observe the visually handicapped child as the child moves about in many and varied situations. Certain techniques have been found helpful by those who have worked with the blind in helping them function comfortably and efficiently within their physical environment. Some of these techniques may be taught by the teacher when situations arise where the blind child shows interest and recognizes the need to improve his mobility skills.

Orientation and mobility are two interrelated terms. A blind person must be well orientated in his environment if he is to become effectively mobile. There are four practical methods for the blind to achieve greater mobility. These methods are referred to as modes of travel.

The four modes of travel are: The Sighted Guide, The Cane, The Dog Guide, and the Electronic Device. Of these four, the two modes of travel which are the most widely used and have proven to be the most effective for a greater number are the sighted guide and cane. These two will be explained in further detail later on in the section.

Many of our present practices and ideas regarding the long cane and the sighted guide were advocated almost a century ago. In 1872, Levy advocated the use of various means of mobility so the blind person could

achieve a sense of confidence and self-reliance. For centuries, people have made use of sticks or staffs in order to aid them in getting about. Early and medieval art show the blind man using the dog as a companion and guide. Many of our current practices in mobility today were brought forth by the crucial needs of blinded veterans following the two world wars. The use of the trained dog guide, which has proven to be a highly successful mobility device for some blind persons, originated in the United States because of one man's desire to utilize a dog for mobility purposes. Scientific efforts are being directed toward the production of electronic guidance devices for the blind; however, these are still in the experimental stage. Much research and technology are yet needed in this area. We can only look to the future with hope for their success.

Terms

The following terms are used by mobility specialists and define techniques which should be understood by visually handicapped children and special teachers.

Orientation: The establishment of awareness of one's position in relation to the environment and significant objects within the environment by utilizing the remaining senses (including sight).

Mobility: The ability to move safely, effectively and comfortably from one place to another within the environment by utilizing the remaining senses (including sight).

Clue: Any sound, odor, temperature, or stimulus which can be used by the visually handicapped child to help him determine

his position or direction, e.g., recognizing the location of the nurses office from the odor of alcohol and disinfectant.

Shore Line: Any continuous line which acts as a guideline along an extended line of travel, e.g., the edge of a sidewalk or a grassline.

Direction Taking: The process of using an object or sound to establish a course of direction toward or away from an object.

Landmark: A familiar object or clue which has an exact and known location in the environment.

Squaring Off: The process of positioning one's body in relation to an object in order to establish a new line of direction.

Run: The mapped out course or route to be traveled to a given objective, e.g., when you leave the room, turn right and go to the 5th door on the right side of the hall.

Trailing: The process of using the back of the fingers to follow a surface while maintaining a line of travel parallel to that surface.

Following Techniques: The blind person's proper grasp just about the elbow of the sighted guide and the subsequent walk.

Dropped Object Procedure

When a blind person drops an object, he should orientate his entire body so that he faces the direction of the sound. If the person waits until the sound is no longer audible, he may move in the incorrect direction, several degrees from the actual direction where the object came to rest.

When the sound is no longer audible, the blind person may approach

the area. He should attempt to stop with his feet approximately three feet short of the object. It would be incorrect and dangerous to bend over as the sighted person does, since there is the possibility of bumping the head on a piece of furniture or other object (Fig. 1). He can use a squatting technique to keep from bumping his head (Fig. 1a). To insure greater safety, he may protect the head by extending an arm up near the face and head (Figures 1b and 1c). He may begin the search with one hand.

There are two distinct patterns of hand movement which can be used for the search. The first is to lightly survey the surface immediately in front of the person, beginning with a very small circular motion and spiraling outward from the beginning point with each successive loop just enough larger than the previous motion covering the surface completely (Figures 1d and 1e). If the object has not been retrieved, the person can move one step forward and repeat the pattern. The other pattern of covering the surface is to sweep the hand being used from side to side over the surface advancing it enough at the end of each sideways stroke so that it overlaps the area covered by the last stroke.

Hand and Forearm Technique

This technique is useful for detecting obstacles when getting around unaided, e.g., a desk or other piece of furniture which may have been rearranged.

The arm is held at shoulder height parallel to the floor, across the front of the body. The upper arm is at obtuse angles to the remainder of the arm. The forearm is held so that the elbow makes an angle a little more than a right angle and the tips of the fingers are extended

slightly beyond the shoulder. (Fig. 2a). As the blind person walks, objects of shoulder level will be encountered by the hand. The time between the hand and body encounter will allow the person time to react and stop before the body hits the obstacle. This technique should be used whenever he is moving about in unfamiliar surroundings and in familiar ones where there is potential obstruction, e.g., doorways. The technique seen in Figure 2b, often referred to as the "monster technique," is incorrect and can be dangerous. The head, lower body, plus the area between the arms are left unprotected.

For added protection in unfamiliar surroundings, a combination of the Hand Forearm Technique mentioned above, and the Lower Cross Body Technique discussed below, can be used (Figures 2c and 2d).

The Lowered Arm Technique

A person standing with his arms at his sides may bring either of his hands to the midline in front of the body, without bending the elbow. The hand is held a foot or so in front of the body with little finger outermost and the thumb toward the body. Holding the hand in this position will keep the person from jabbing the thumb into some hard object and at the same time will allow the fingers to encounter an obstacle early enough to give the person time to react before bumping (Fig. 2e). A slight modification is permissable when objects below the level of the fingertips are believed present, e.g., low tables, etc. This may be accomplished by lowering the shoulder. This should not be a leaning forward of the entire upper body. Limitations of the method are: lower objects are not directed, one side of the body is left relatively unprotected, and the face is open to bumps unless the raised (upper) Hand Fore-

arm Technique is used simultaneously. The student should be made aware of the limitations.

Trailing

On occasion, it is more desirable for a blind person to follow a wall, table edge, or other line. The proper technique for doing this is to keep the arm straight at the elbow and move the hand along the wall so that it is about a foot ahead of the body and at approximately the height of the hip. The person can walk along the wall not more than a foot from it. The hand on the side near the wall is held with the fingers relaxed, palm down and thumb folded near the palm to protect it from being jabbed into obstacles. The surface is touched lightly with the distal joint or joints of the ring and little fingers. Contact is made with the side of each finger closest to the wall.

This method often may be used by a recently blinded individual, which may be his first successful attempt at independent travel. Although blind people should not depend entirely on trailing as a means of mobility, he may want to use this as a means for tactual identifcation. (Fig. 3a - 3b).

Use of Sighted Guide

It is desirable for a blind person to be active in society. When he thinks of "using" a guide, this implies action rather than being passively towed along. Actually in some situations, the blind may be doing the guiding, e.g., he may be telling the sighted person where to go.

The person being guided should grasp the guide firmly but gently just above the elbow on the side on which he intends to walk (Figures

4a - 4b). That is, the blind person would take the left arm with his right hand if he intended to walk on the left side of the guide. He walks half a step behind the guide so that he will have time to react to body movements of the guide. The guide should walk at his normal pace unless there is a factor adversely affecting the pace of the blind person. The blind person should pay attention to the arm motions, since these movements tell what the guide is doing, or is about to do. (Figure 4c.) The reason for grasping the arm above the elbow is to leave the guide's arm free to do whatever he needs to do with it, such as carry a bundle or open a door, or reach in his pocket. A child might be allowed to take the arm just above the wrist in preference to letting him hold hands.

For ascending and descending stairs, the guide should pause slightly before beginning the ascent or descent. This tells the follower to be alert for coming body motion that will let him know if the guide is doing something out of the ordinary. Stairs should be approached at right angles so that the blind person does not get to them at the same time or ahead of the guide. The same technique is used at curbs, which might be considered a very short stairway.

Use of the Long Cane

The Hoover cane, used with the cane technique, is a modern tool for independent travel with which blind persons should be familiar. Even if he plans to use a dog guide, there will be situations where it may be necessary to use a long cane. Training in the use of the Hoover technique, which pre-supposes the training of the senses, is a "must" for every blinded person to maintain effective mobility.

The cane is not a cane at all in the usual sense, but a kind of

antenna or wand, designed precisely to be an extension of the user's touch senses. Usually, it is made of thin, aluminum tubing or fiberglass not more than half an inch in diameter. It is tipped at the ground end with a metal or plastic dowel and sometimes curved at the upper end like a shepherd's staff. The purpose of the cane is to extend the person's foot reach as well as arm reach; it's length is determined by the length of the individual's normal stride. Canes are fitted to the individual prescription and reach approximately a little above the base of the sternum.

The proper use of this cane must be taught by a specialist trained in the Hoover cane technique; the cane is useless without proper technique. But with it, the blind person can learn to move with independence, ease, and even grace.

When going up stairs, a procedure is used called the diagonal technique. He squares off by putting his toes against the first step. He measures the width, height, and length of the first step with his cane. When he finds the width of the staircase, he moves to the right, places the cane in his left hand, and grasps the handrail with his right hand. He should be holding the cane with his thumb extended down the shaft, with his arm raised to shoulder height or slightly above. This should extend diagonally across in front of his body. He then moves the tip of the cane so that it touches the back of the second step. As he moves up the steps the cane tip will touch the back of each succeeding step (Fig. 5k). When the person reaches the top of the staircase, the cane will swing free. This tells the person that he has reached the top step. He should then extend the cane to the left, in front, and to the right to

clear the area and warn of any obstacles. (Figure 5L.)

When using the Hoover technique (touch technique) for traveling, the cane is placed in the palm of the hand with the upper end extending to the wrist. The index finger runs along the shaft of the cane. The cane is held in the hand by the thumb and middle finger. The grip is firm but relaxed. The ring and little fingers grip the cane and give the user added balance and control (Fig. 5a, 5b, 5c).

The arm of the hand using the cane is extended on a diagonal line from the shoulder to the midline of the body just below the waist. The elbow is in a locked position and the arm is bent slightly so that the palm of the hand is vertical with the floor. (Figures 5d, 5e, 5f.) The locked elbow should be made to rest on the lower ribs near the stomach cavity. The space between the thumb and the index finger should be on the top edge of the cane as it is extended. The cane is pivoted in an arc from side to side by using wrist action only. The wrist is not rolled. The arc of the cane should extend to the width of each shoulder. The angle of the cane should run on a line extending from the shoulder to the hand, which is about a foot in front of the body, thus clearing a path a yard or more in front of the person.

In using the Hoover technique, a definite rhythm must be established and coordinated with the person's stride. Before the person steps out with his left foot, the area must first be cleared with the cane. Using the wrist only, the cane is then brought to the right side as he steps forward with the left foot. After he knows the right side is clear, he moves the cane back to the left side as he steps forward with his right foot. Therefore, the cane is clearing on the opposite side to which he is

stepping; consequently, the person is always clearing a path one step ahead of himself, e.g., as he steps with the right foot, he clears to the left and as he steps with the left foot he clears to the right, etc. This alternate cadence of the cane with the feet is the safest method yet devised. (Figures in 5g and 5h.)

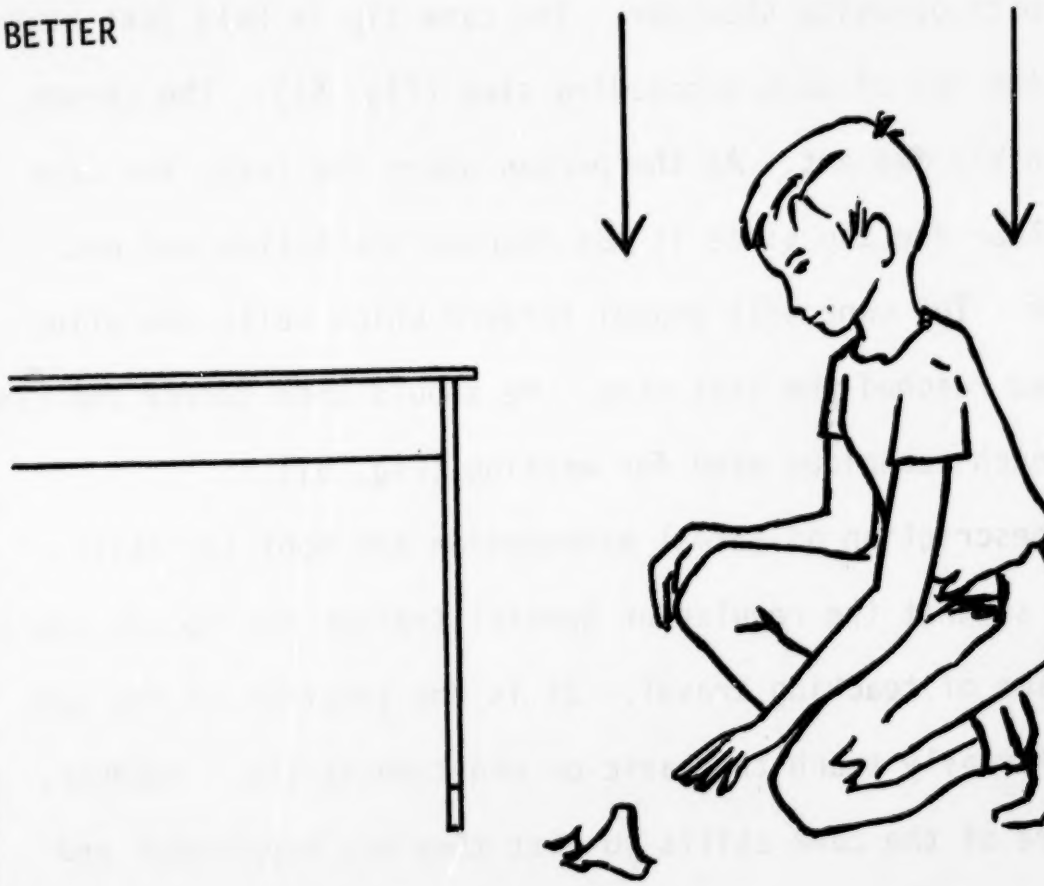
Going down stairs can be hazardous for a blind person. If the touch technique is used properly, the cane will tell the user of the oncoming step. The person then stops, squares off by extending the toes over the edge of the top step. With his cane, he measures the width, height, and length of the first step. Upon finding the width of the staircase, he moves to the right, grasps the cane similar to the way a person holds a flashlight, e.g., wraps the fingers and thumb around the handle of the cane. He relaxes his arm so that it hangs at his side. The cane extends at an angle diagonally in front of his body so that the tip is parallel with opposite shoulder. The cane tip is held just high enough to clear the top of each succeeding step (Fig. 5i). The person is ready to begin his descent. As the person nears the last, the cane will no longer clear the top since it has reached the bottom and has touched the floor. The cane will propel forward which tells the blind person that he has reached the last step. He should then survey the area and resume the touch technique used for walking (Fig. 5j).

The above description of formal orientation and mobility skills has been offered so that the regular or special teacher may become aware of the complexities of teaching travel. It is the function of the special teacher to formally teach the basic or pre-cane skills. However, they must be aware of the cane skills so that they may supplement and and reinforce instruction given by the mobility specialist.

INCORRECT AND DANGEROUS

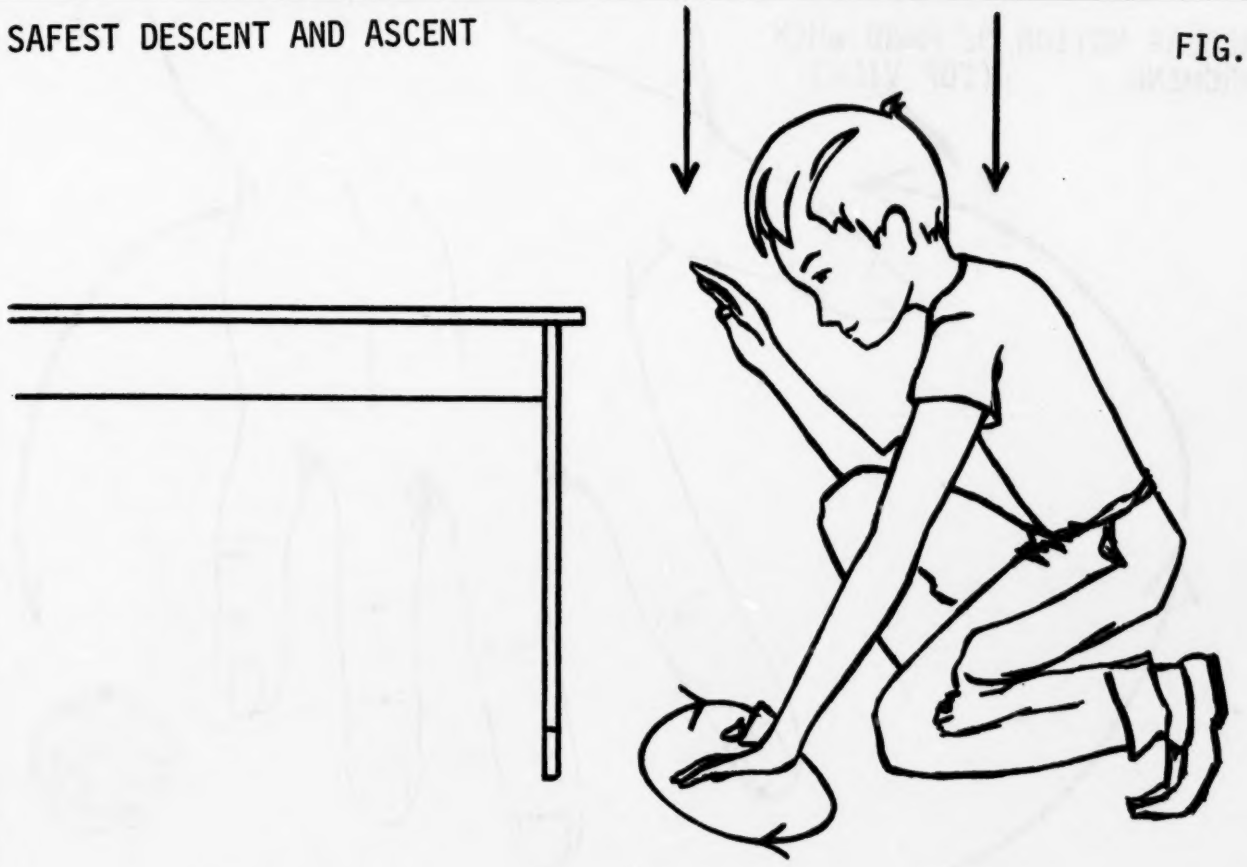
FIG. 1A

BETTER



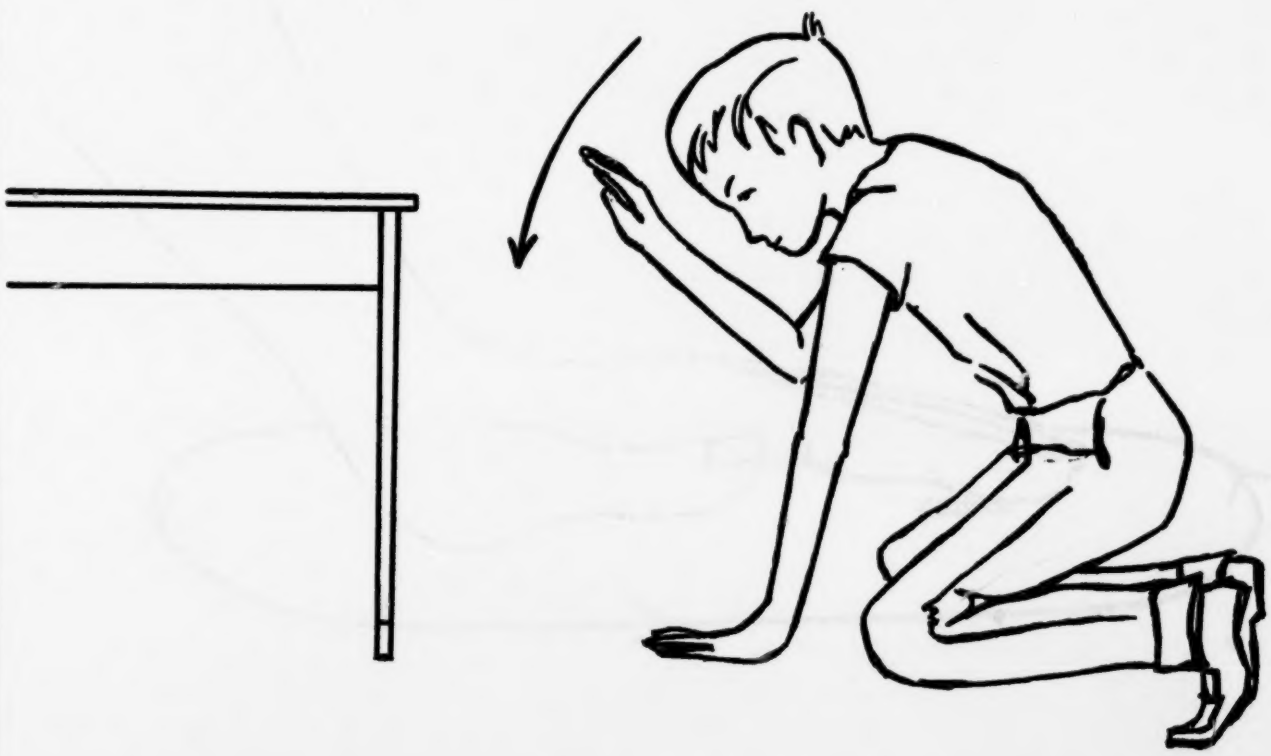
SAFEST DESCENT AND ASCENT

FIG. 1B



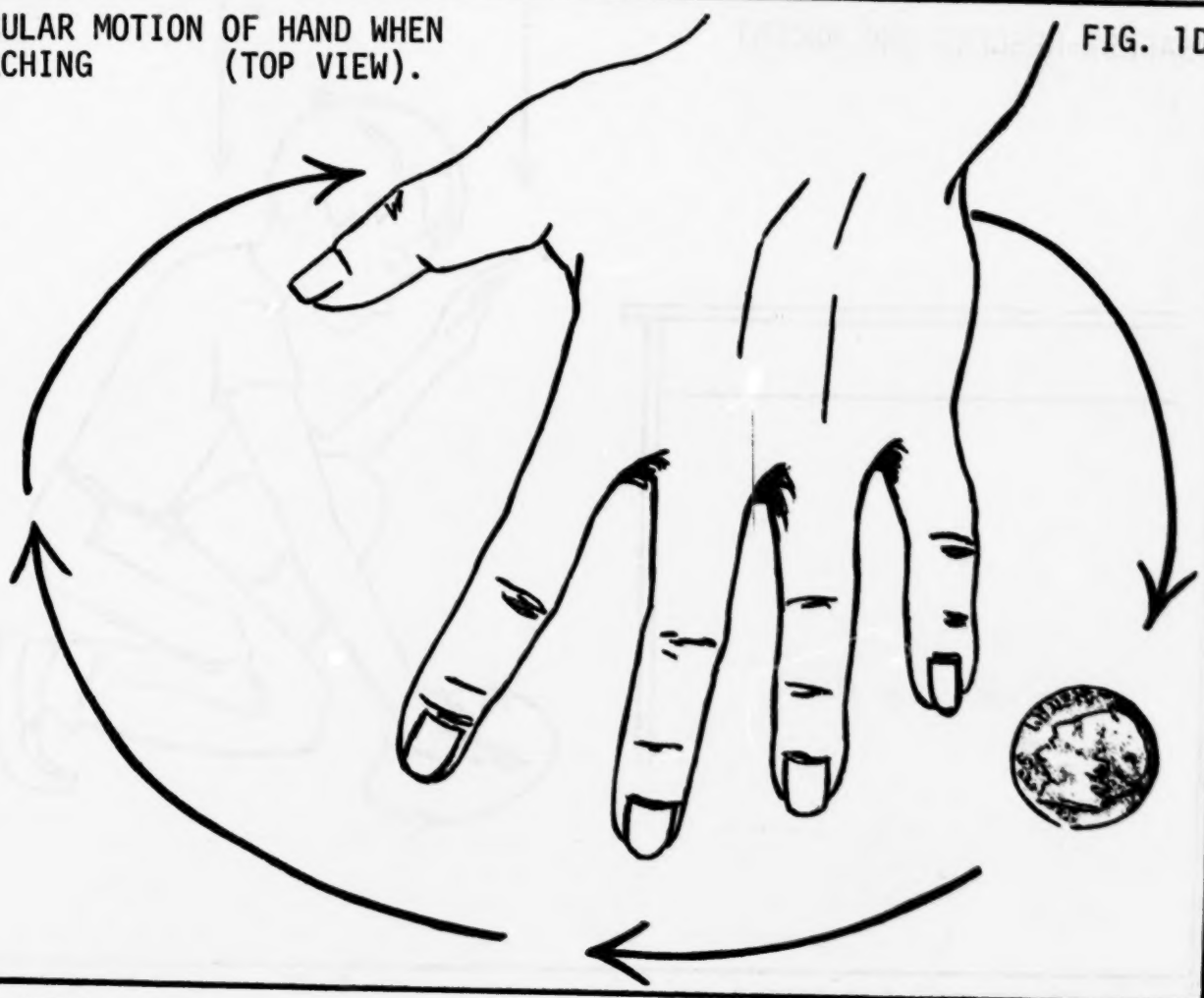
HAND PROTECTS HEAD WHILE BENDING

FIG. 1C



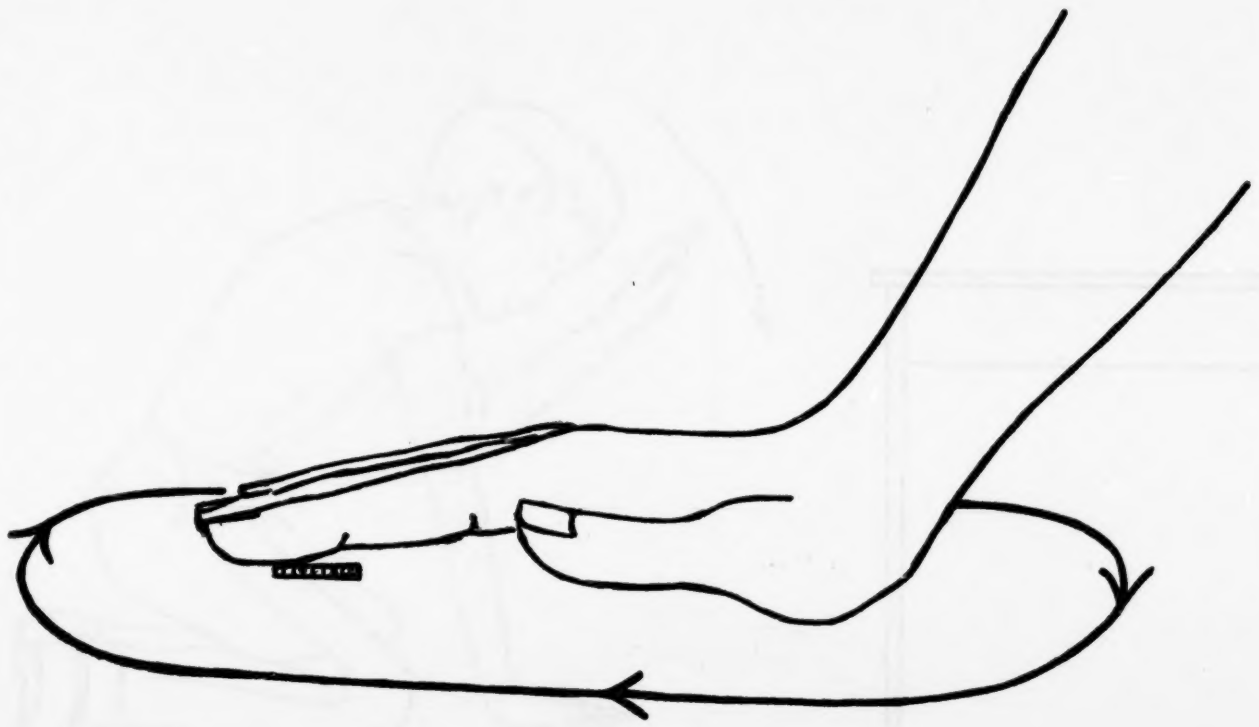
CIRCULAR MOTION OF HAND WHEN SEARCHING (TOP VIEW).

FIG. 1D



SIDE VIEW

FIG. 1E



FOREARM TECHNIQUE
(PROTECT HEAD FROM HANGING OBJECTS)

FIG. 2A

INCORRECT AND DANGEROUS

FIG. 2B

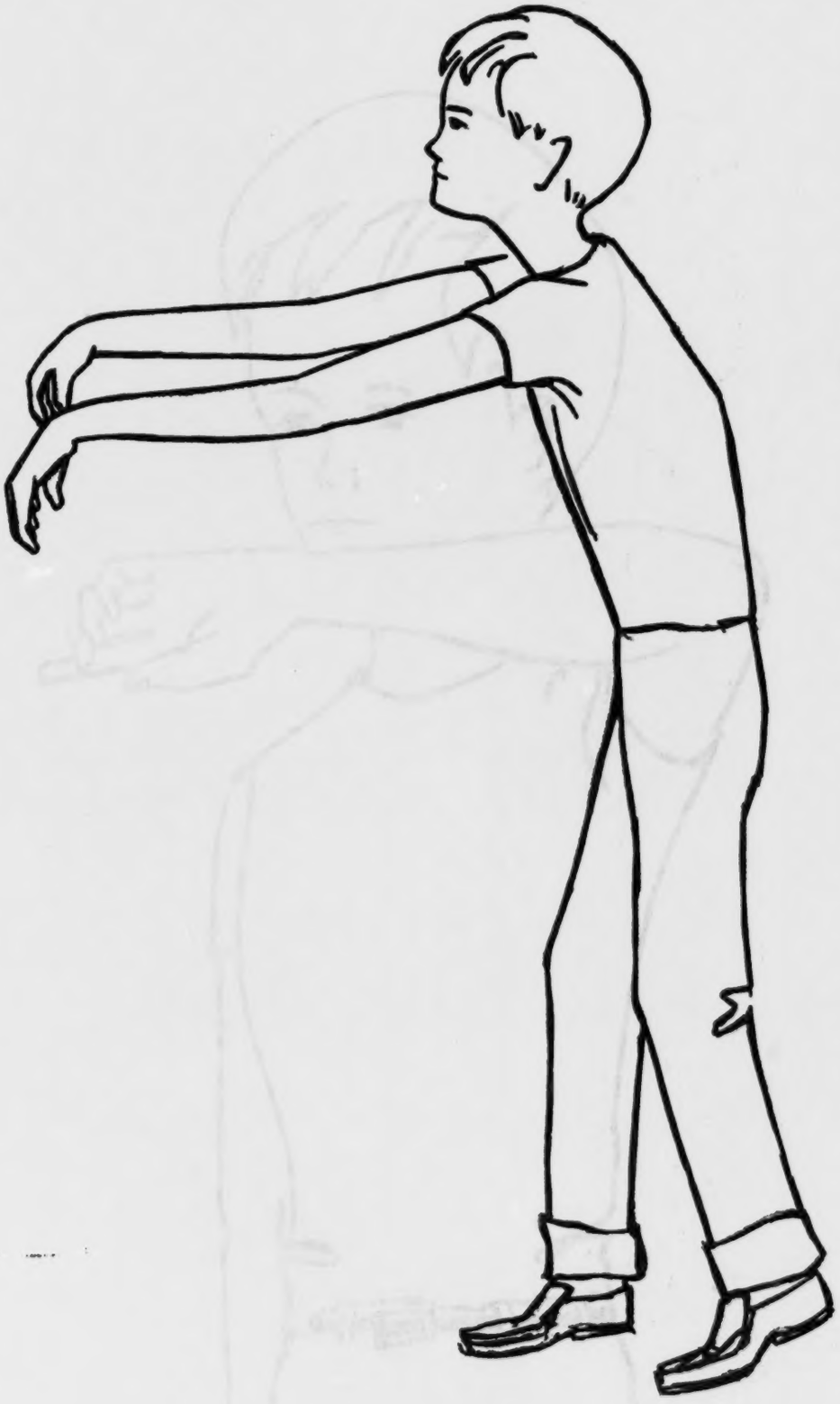


FIG. 2C

FOREARM IN UPPER POSITION
CROSS BODY (LOWER POSITION)

FIG. 2D

CROSS BODY (LOWER PROTECTION)

FIG. 2E

FIG. 3A

SIDE VIEW TRAILING WALL

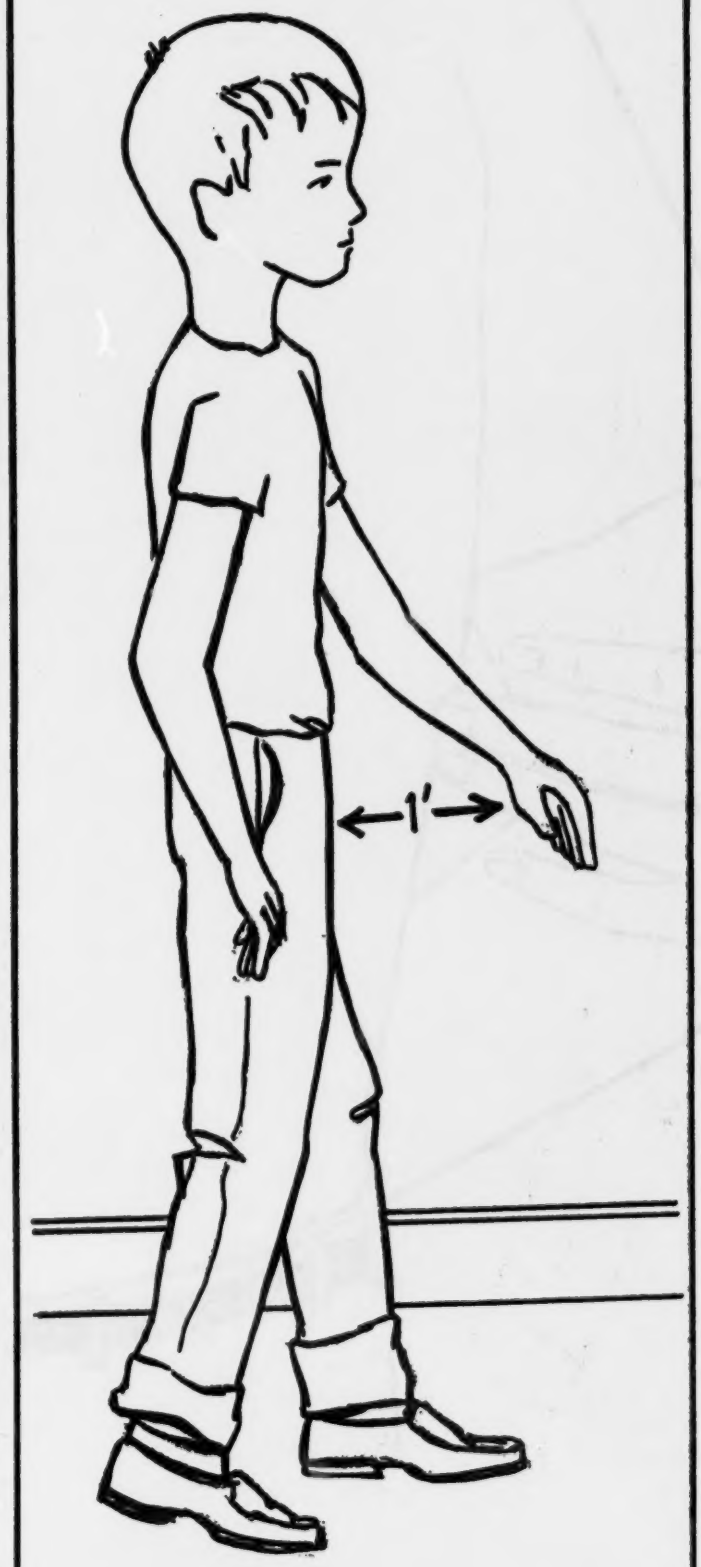
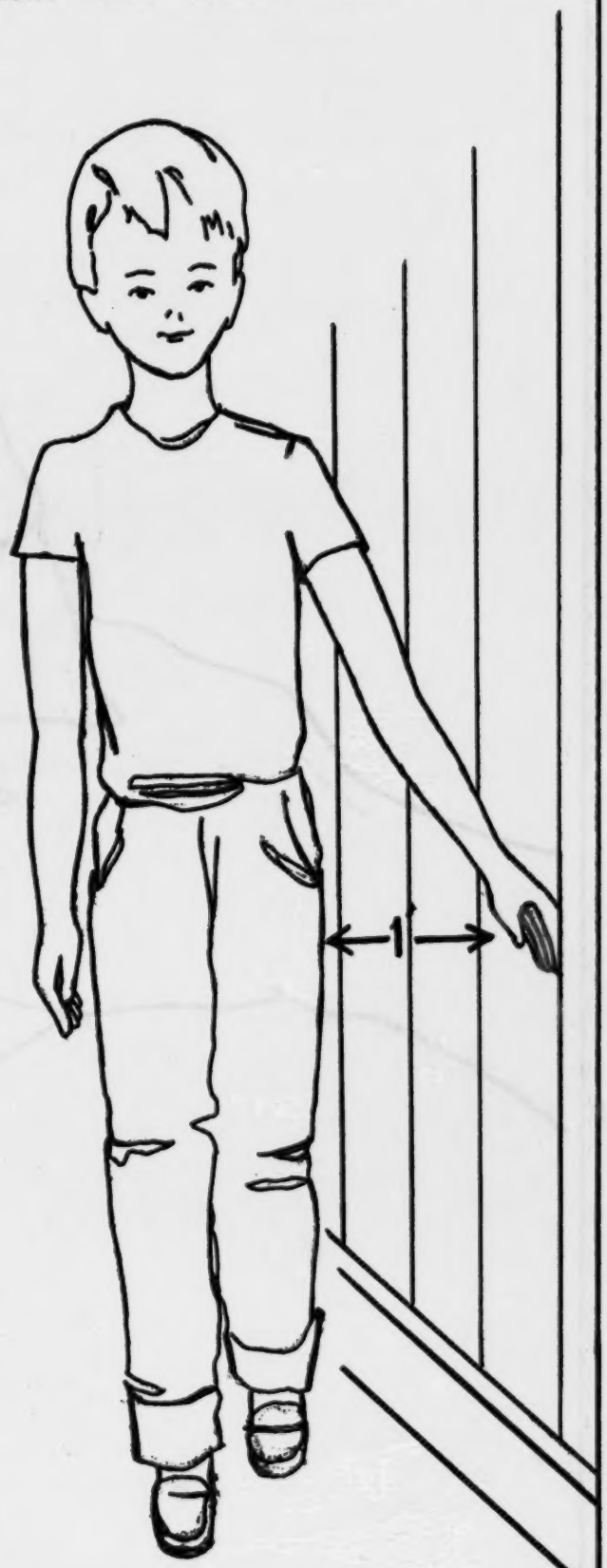


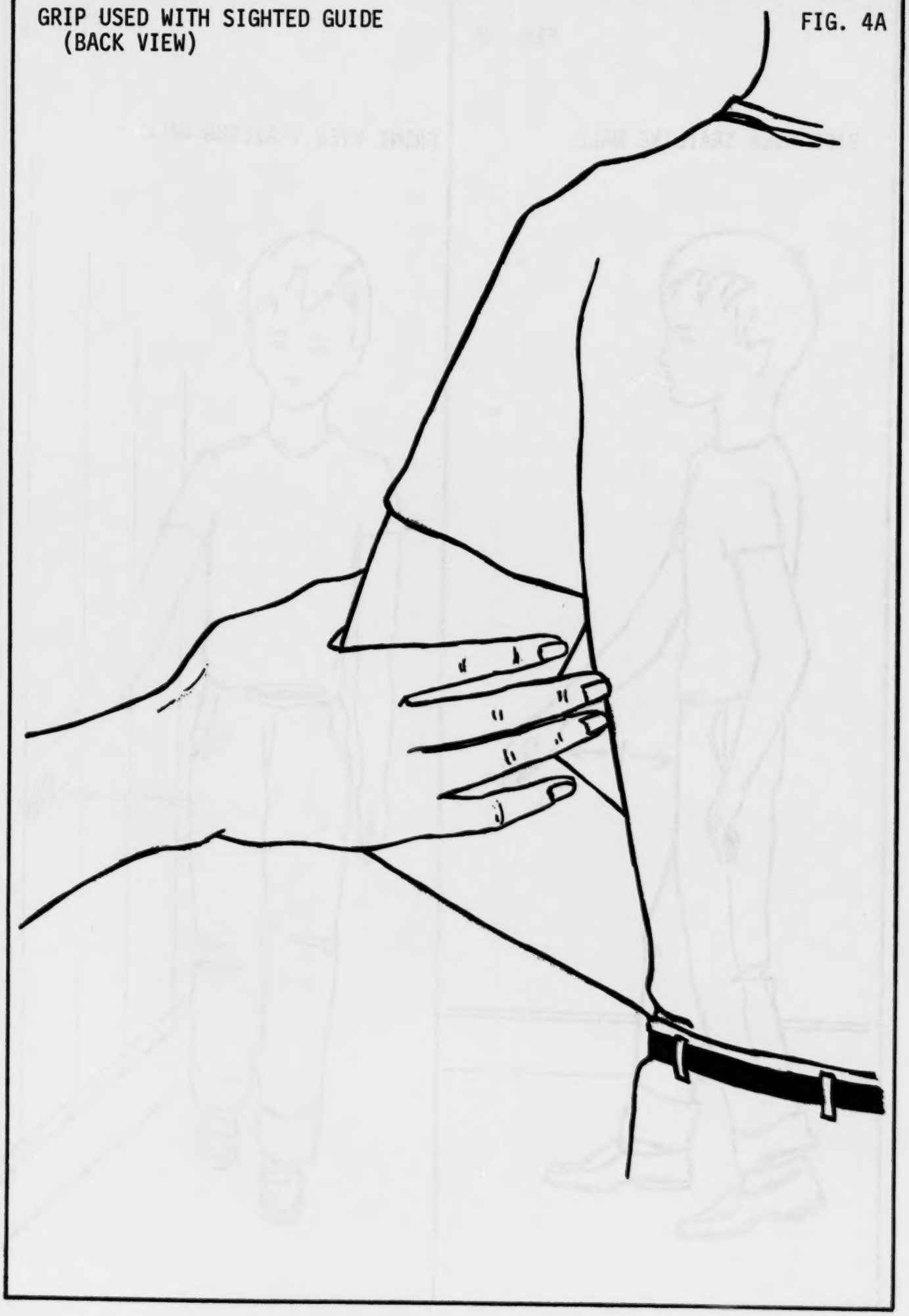
FIG. 3B

FRONT VIEW TRAILING WALL



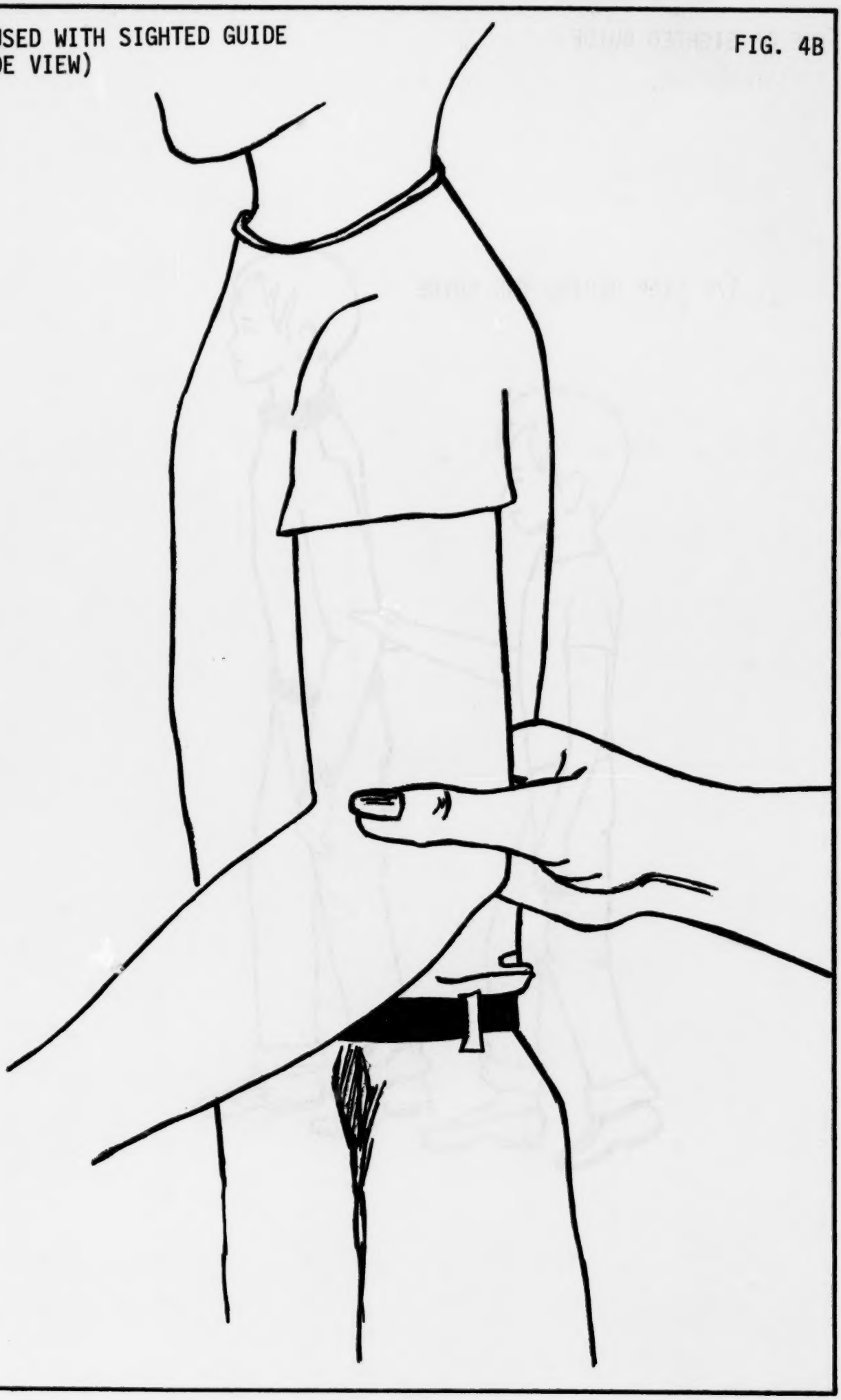
GRIP USED WITH SIGHTED GUIDE
(BACK VIEW)

FIG. 4A



GRIP USED WITH SIGHTED GUIDE
(SIDE VIEW)

FIG. 4B



USE OF SIGHTED GUIDE

FIG. 4C

1/2 STEP BEHIND THE GUIDE

GRIP USED WITH CANE
(FRONT VIEW)

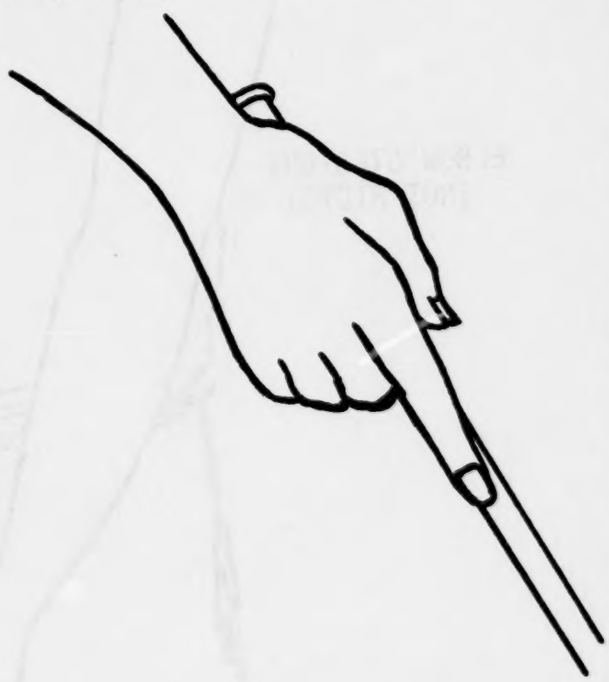
FIG. 5A

LEFT
(SIDE VIEW)

FIG. 5B

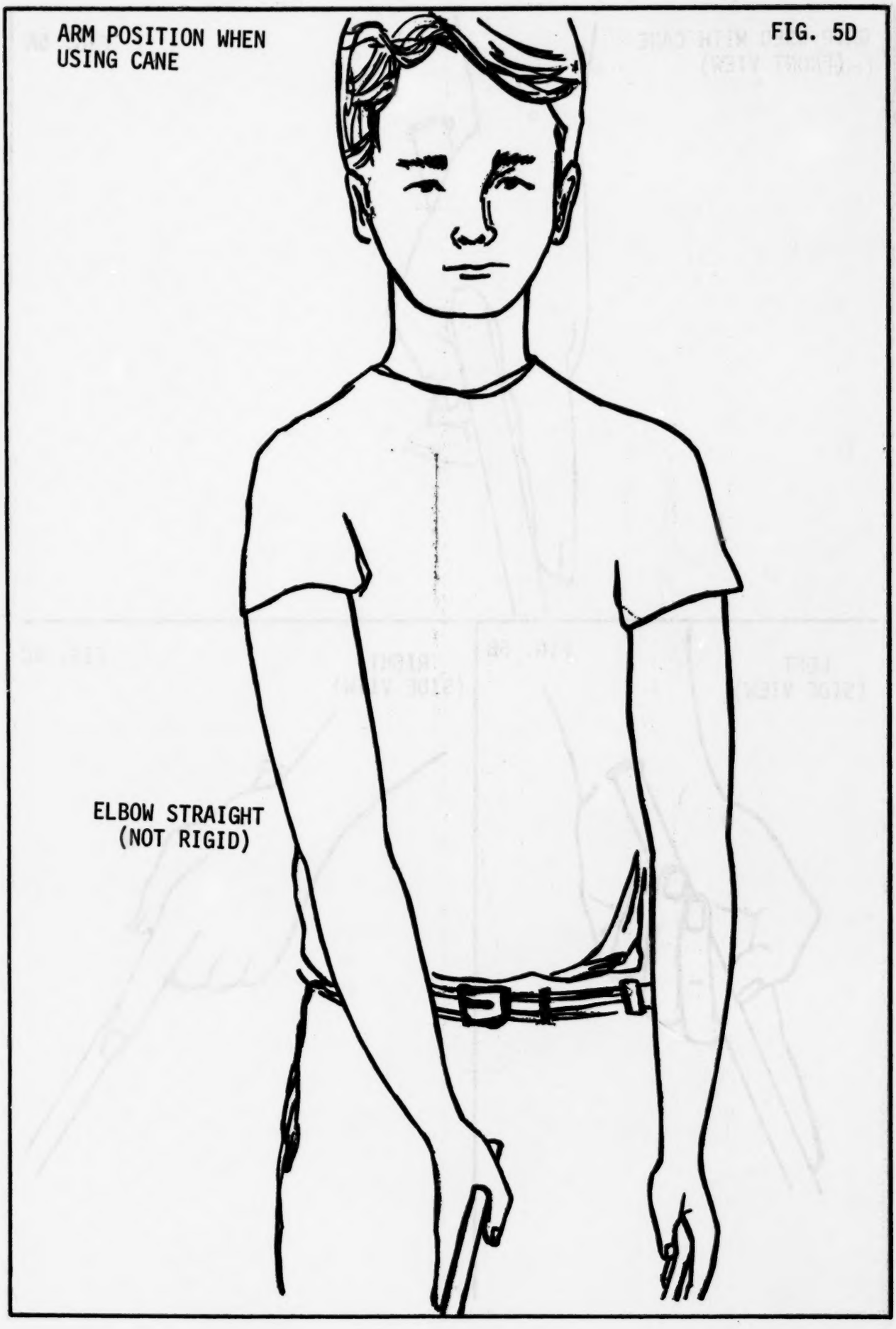
RIGHT
(SIDE VIEW)

FIG. 5C



ARM POSITION WHEN
USING CANE

FIG. 5D



ELBOW STRAIGHT
(NOT RIGID)

USE OF CANE
(FULL VIEW)

FIG. 5E

(SIDE VIEW)

FIG. 5F

FIG. 5G

CANE POSITION WHEN THE NEXT STEP IS WITH THE LEFT FOOT. (TOP VIEW)

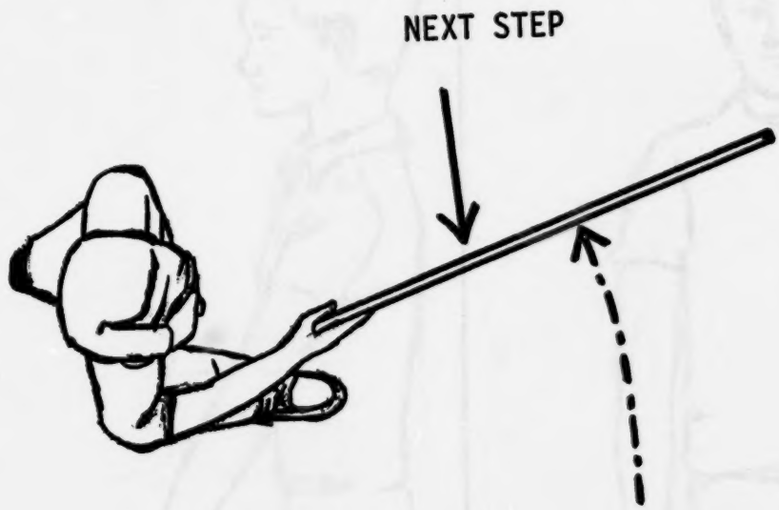
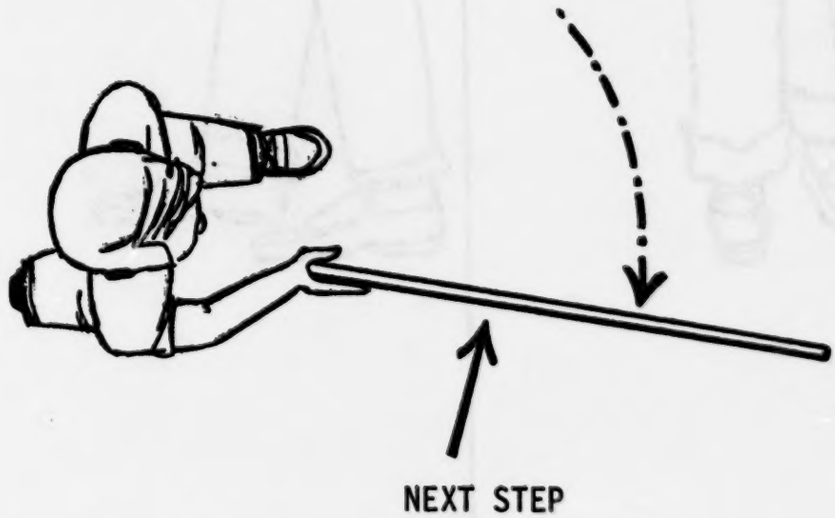
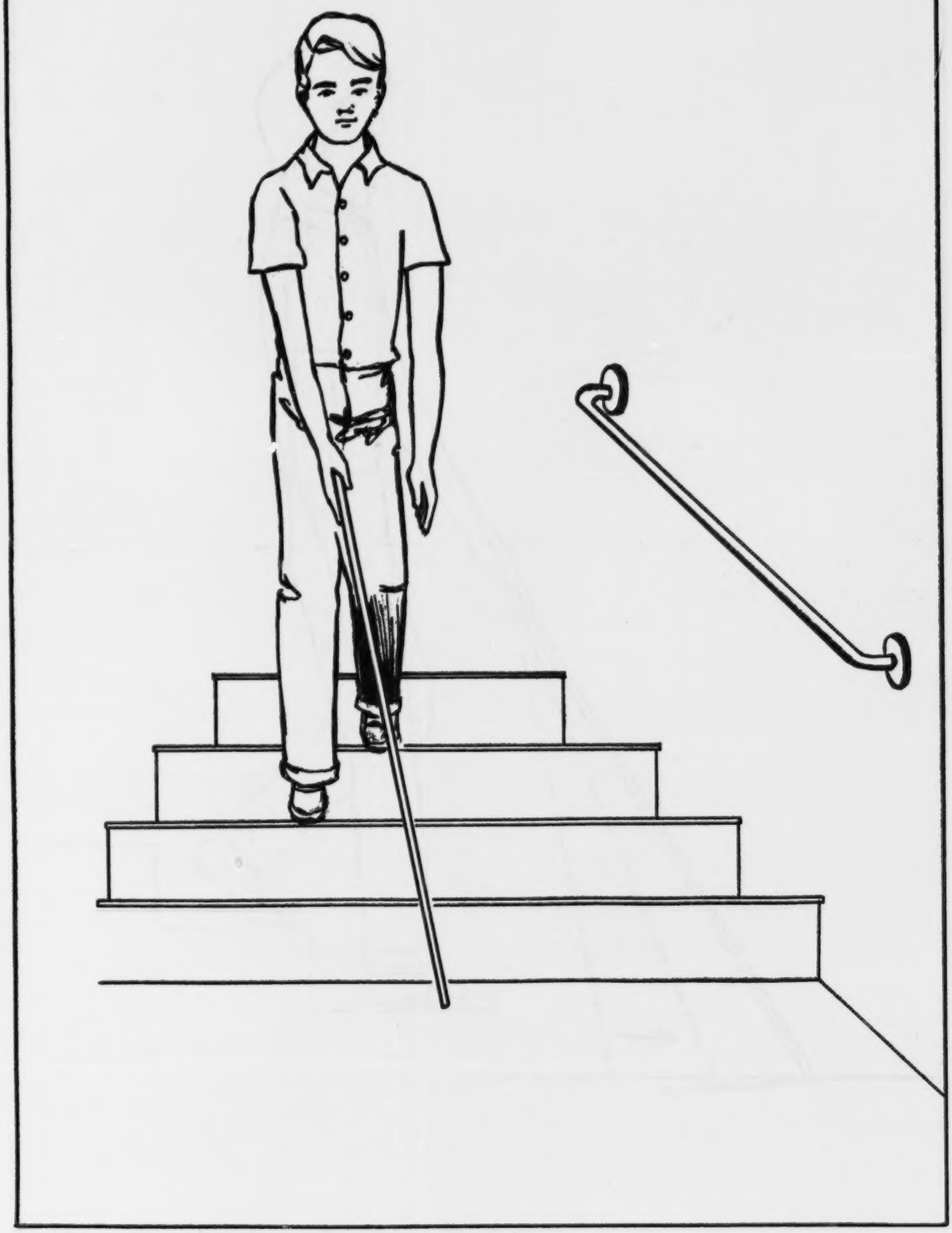


FIG. 5H

CANE POSITION WHEN THE NEXT STEP IS WITH THE RIGHT FOOT. (TOP VIEW)

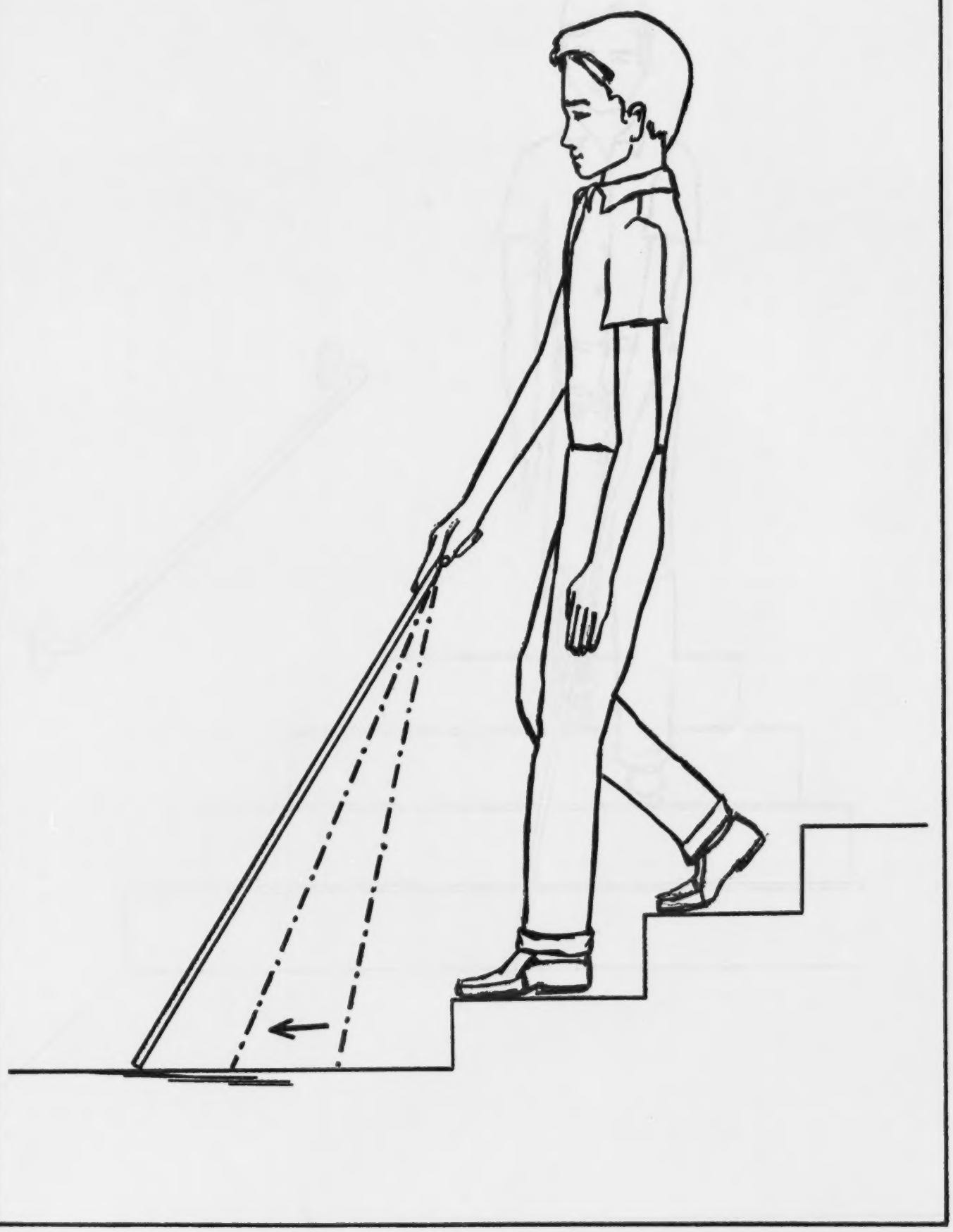


GOING DOWN STAIRS FIG. 5I



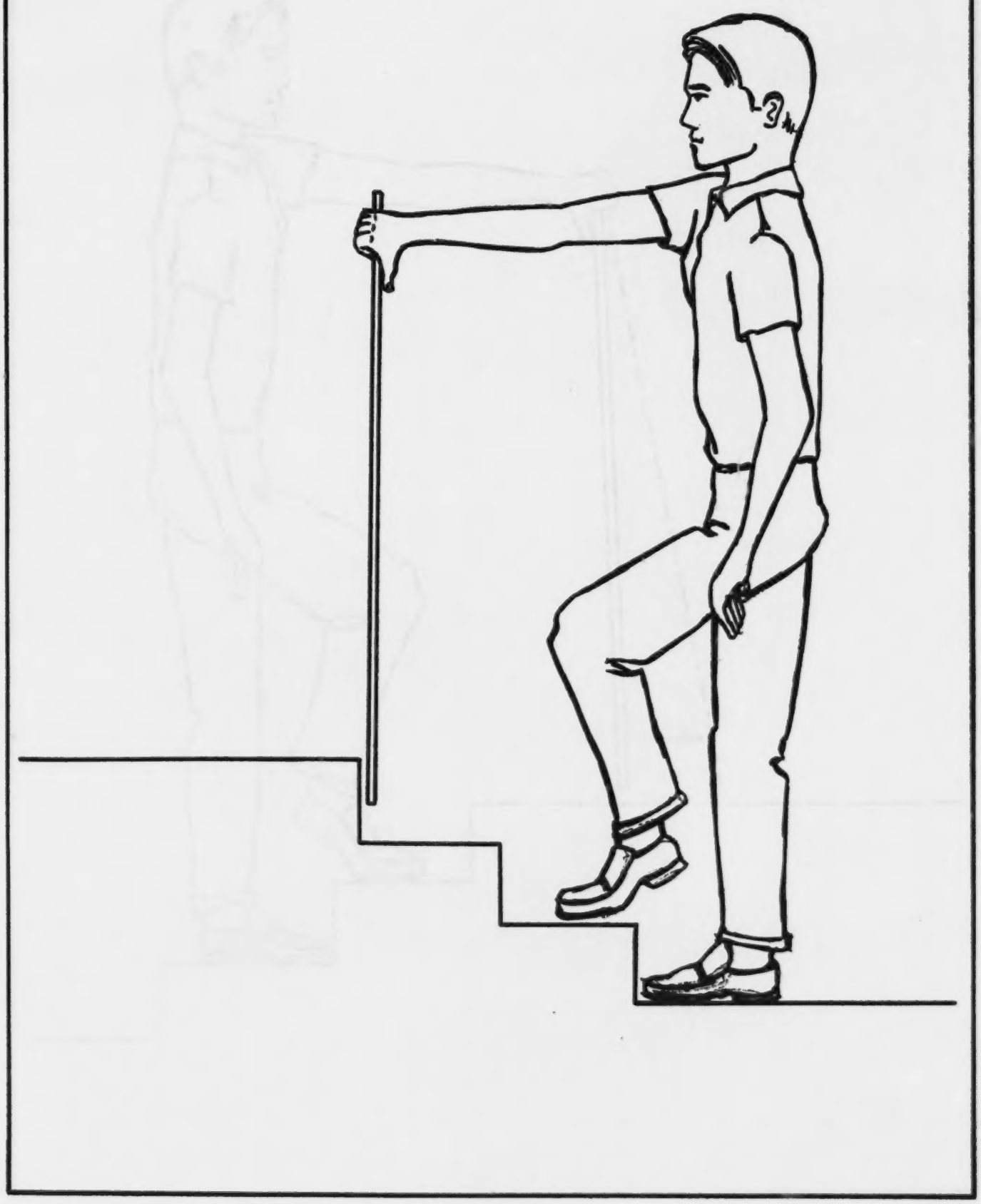
REACHING THE BOTTOM STEP

FIG. 5J



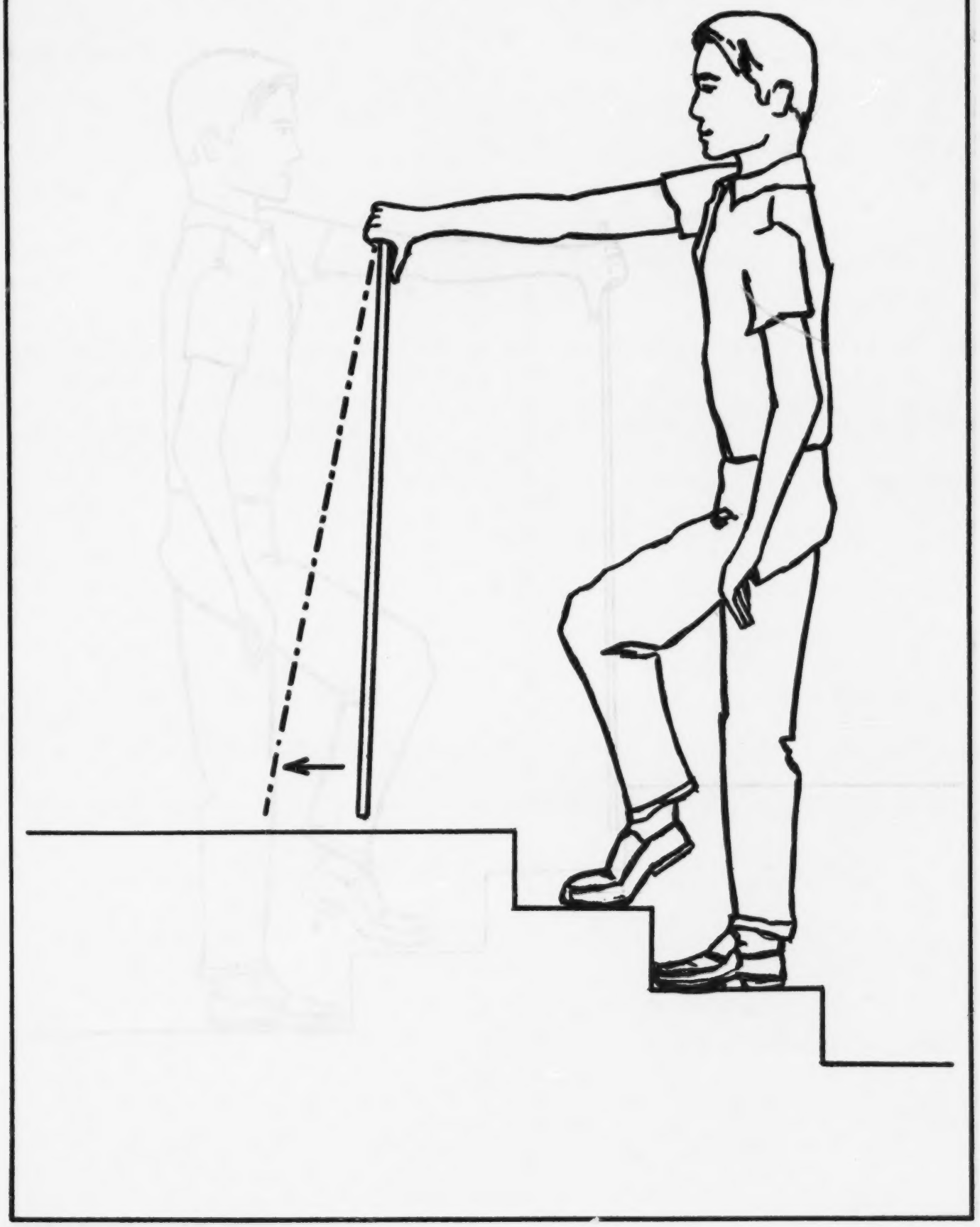
GOING UP STAIRS

FIG. 5K



REACHING THE TOP STEP

FIG. 5L



COMMON VISUAL IMPAIRMENTS AND RELATED PROBLEMS
By FRED GUFFEY

Defects in Refraction

The most common and least disabling impairments of vision are refractive errors. These are easily detected by the eye specialist, and can be compensated by corrective lenses worn either in spectacle frames or as contact lenses.

A. Hyperopia, or farsightedness occurs when, because of a shortened eyeball, the light rays converge at a point behind the retina. The more hyperopic the eye, the more the eye has to accomodate in order to try to get a clear image. Where severe hyperopia exists, the excessive use of accommodation may cause symptoms such as eye fatigue, blurring, and headaches.

B. Myopia, or nearsightedness, the eyeball is abnormally elongated and the light rays converge at a point in front of the retina. Myopia causes blurred vision when the eyes try to focus on distant objects. A myopic person can see distinctly when the object is brought close enough so that the relaxed lens can focus the rays onto the retina. Since it is wise to use accommodation for eye hygiene purposes, the individual who has myopia should be encouraged to wear his glasses for both distance and near vision.

   The individual who has progressive myopia should be under the constant supervision of an eye physician. In this condition the eyeball continues to increase in length and the person may have to limit certain types of physical activities in order to prevent detachment or disease of the retina, which can lead to blindness.

C. Astigmatism is a refractive error due to the shape of the eye. Rays of light entering the eye in the different meridians do not have the same focus and for that reason do not produce a clear image on the retina.

Disorders of the Cornea

The cornea, since it protrudes somewhat, is a vulnerable site for injury. Superficial injury of the cornea responds to treatment, but a number of disease processes can lead to clouding and scarring of the cornea and a resultant impairment of vision.

A range of diseases can present, as a complication, a keratitis or inflammation of the cornea with residual scarring. This sometimes occurs

in association with congenital syphilis, sometimes as the result of trauma, and sometimes is related to a disease of the blood vessels supplying the anterior part of the eye. If the remaining structures of the eyeball are intact, it is often possible to correct the scarring which follows keratitis by means of a corneal transplant.

Albinism

Albinism is a hereditary loss of pigment in the iris, skin, and hair. It is usually associated with lowered visual acuity, nystagmus and photophobia and often accompanied by refractive errors. A person who has albinism can usually benefit from a distance aid and a high-plus reading spectacle and dark glasses.

Amblyopia ex anopsia

Amblyopia ex anopsia is an adventitious and progressive condition of the eye. A dimness of vision occurs without any apparent disease of the eye. It is caused by nonuse of the eye. Double vision, or diplopia, may be so distressing to an individual that he gradually suppresses the image in one eye, and in time such an eye may cease to function.

Aphakia

Aphakia is characterized by the absence of a lens. The term "Aphakic" is usually applied to an eye from which the lens has been removed by operation. Congenital aphakia is rare.

Cataracts

A cataract is a condition in which the normally transparent lens becomes opaque and clouded, and vision becomes blurred. In its most common form, a cataract is a degenerative disease occuring as part of the aging process. In this form, the involvement is usually bilateral, although the rate of cataract formation may not be the same for both eyes.

The surgical procedure, customarily undertaken on each eye separately when the appropriate degree of decreased visual acuity has been reached, calls for total removal of the clouded lens

Cataracts which have their origin in causes other than the degenerative process include those appearing congenitally, those caused by ionizing radiation, electric burns, or those which are secondary to systemic diseases such as diabetes, or those produced by trauma. These cataracts do not have a uniform prognosis; a congenital cataract can be corrected surgically early in life without necessarily removing the entire lens, but a cataract which results from diabetes is not so favorable for surgical repair because of possible complications.

Often the treatment for congenital cataract is so good that with compensating glasses cataractous children are not in need of special education facilities. In other cases the lens is only partly clarified, and vision is definitely affected.

Coloboma

Coloboma is a type of congenital anomaly in which a portion of a structure of the eye is lacking. A high-plus reading spectacle or a hand-held lens may be helpful to the student.

Chorioretinitis

Chorioretinitis is an inflammation of the choroid and retina. There may be either a peripheral field loss or a central field loss. A high-plus reading spectacle is usually needed, and the student may be on eye treatment or medication.

Glaucoma

Glaucoma occurs when the intraocular pressure is elevated to a level which the eye cannot tolerate without injury to its structural components

or impairment of function. Prevention of partial or total loss of vision from glaucoma is possible only if the disease is detected and treated early.

Detachment of Retina

Retinal detachment sometimes occurs in cases in which both high myopia and pathological conditions of the eye exist. If the necessary attention is given as soon as possible after detachment occurs, the retina may in some cases be reattached, and part of the vision may be saved.

Nystagmus

Nystagmus is an involuntary, rapid movement of the eyeball. It may be lateral, vertical, rotary, or mixed.

Retinitis Pigmentosa

Retinitis pigmentosa (primary pigmentary degeneration) is a chronic progressive degenerative disease of the retina with a hereditary tendency. It may occur early in childhood or manifest itself later. One of the early symptoms is night blindness. The visual fields are usually restricted, leaving only central vision, which may later be destroyed. At present no known treatment is successful in improving the condition or in arresting its progress.

Retrolental Fibroplasia

Retrolental fibroplasia is a disease of the retina in which a mass of scar tissue forms in back of the lens of the eye. Both eyes are affected in most cases and it occurs chiefly in prematurely-born infants who receive excessive oxygen.

Additional terms may be found in "Vocabulary of Terms Relating to the Eye", National Society for the Prevention of Blindness, Inc., 79 Madison Avenue, New York, New York 10016.

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304 West 15th Street
Austin, Texas 78701

Wisconsin

Dr. LeRoy Aserland, Director
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415 West Gilman Street
Madison, Wisconsin 53706

A BIBLIOGRAPHY CONCERNING EDUCATION OF THE VISUALLY HANDICAPPED

No effort has been made to revise or up-date the original bibliography. It is suggested that AAWB, AFB, Perkins and other holdings be checked for complete listing in any particular area of interest. In addition, the appropriate regional IMC should be consulted for additional help.

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APPENDIX A

CHILDREN WITH OTHER THAN USUAL VISION OFTEN POSE PROBLEMS FOR EDUCATORS. An informative report can do much to resolve these by interpreting the ocular difficulty in terms that can be applied to the school situation.

A changing and enlightened philosophy no longer segregates the child with less than normal vision, nor does it believe that he should be treated as an "eye cripple." It is no longer believed that one saves sight by conserving it; instead, eye work is encouraged because it has been found to result in greater proficiency. The visual task is no longer made easier with special larger print if the smaller print can be read with comparative comfort. It accentuates the positive, the vision the child has, rather than stressing the visual lack. It recognizes that some children will need special educational services.

Much superstition, idle talk, and outdated ideas about the eyes still exist to confuse the educators. For example, reading in bed does not make one's eyes weak. Reading in poor light in itself may not be comfortable, but it will not cause organic eye changes, and there are enough sound reasons for condemning long periods of television watching than to threaten it will ruin the eyes.

This report form is suggested as a tangible means for the transmission, in understandable terms, of the visual potential of the student and as a source of information necessary for classification purposes.

Albert E. Sloane, M.D., *Chairman*
N.S.P.B. Committee on Vision Screening

PUPILS WITH SEVERE VISION PROBLEMS AFTER CORRECTION ARE EDUCATED EITHER IN RESIDENTIAL OR DAY SCHOOLS.

When day school placement is appropriate, they are part of the regular class program. Any needed additional education services are provided by a specially trained teacher, special materials and equipment.

Those who function with vision are encouraged, by all appropriate means, to use their vision to its fullest capacity. Low vision aids will benefit some.

The eye report is used by school administrators and special teachers to assist in the determination of:

1. the pupil's educational needs
2. the type of educational placement
3. educational planning and curriculum adaptation
4. the need for large type print
5. the need for braille
6. pupils to be reported as legally blind to the American Printing House for the Blind to qualify for books and equipment.

NAME OF PUPIL _____ SEX _____ RACE _____
(Type or print) (First) (Middle) (Last)

ADDRESS _____ DATE OF BIRTH _____
(No. and street) (City or town) (County) (State) (Month) (Day) (Year)

GRADE _____ SCHOOL _____ ADDRESS _____

I. HISTORY

A. Probable age at onset of vision impairment. Right eye (O.D.) _____ Left eye (O.S.) _____

B. Severe ocular infections, injuries, operations, if any, with age at time of occurrence _____

_____

C. Has pupil's ocular condition occurred in any blood relative(s)? _____ If so, what relationship(s)? _____

II. MEASUREMENTS

(See back of form for preferred notation for recording visual acuity and table of approximate equivalents.)

A. VISUAL ACUITY

	DISTANT VISION			NEAR VISION			PRESCRIPTION		
	Without correction	With best correction*	With low vision aid	Without correction	With best correction*	With low vision aid	Sph.	Cyl.	Axis
Right eye (O.D.)									
Left eye (O.S.)									
Both eyes (O.U.)							Date		

B. If glasses are to be worn, were safety lenses prescribed in: Plastic _____ Tempered glass _____ *with ordinary lenses

C. If low vision aid is prescribed, specify type and recommendations for use. _____

_____

D. FIELD OF VISION: Is there a limitation? _____ If so, record results of test on chart on back of form.

What is the widest diameter (in degrees) of remaining visual field? O.D. _____ O.S. _____

E. Is there impaired color perception? _____ If so, for what color(s)? _____

III. CAUSE OF BLINDNESS OR VISION IMPAIRMENT

A. Present ocular condition(s) responsible for vision impairment. (If more than one, specify all but underline the one which probably first caused severe vision impairment.)
O.D. _____
O.S. _____

B. Preceding ocular condition, if any, which led to present condition, or the underlined condition, specified in A.
O.D. _____
O.S. _____

C. Etiology (underlying cause) of ocular condition primarily responsible for vision impairment. (e.g., specific disease, injury, poisoning, heredity or other prenatal influence.)
O.D. _____
O.S. _____

D. If etiology is injury or poisoning, indicate circumstances and kind of object or poison involved. _____

_____

IV. PROGNOSIS AND RECOMMENDATIONS

A. Is pupil's vision impairment considered to be: Stable _____ Deteriorating _____ Capable of improvement _____ Uncertain _____

B. What treatment is recommended, if any? _____

C. When is reexamination recommended? _____

D. Glasses: Not needed _____ To be worn constantly _____ For close work only _____ Other (specify) _____

E. Lighting requirements: Average _____ Better than average _____ Less than average _____

F. Use of eyes: Unlimited _____ Limited, as follows: _____

G. Physical activity: Unrestricted _____ Restricted, as follows: _____

TO BE FORWARDED BY EXAMINER TO:

Date of examination _____

Signature of examiner _____ Degree _____

Address _____

If clinic case: Number _____ Name of clinic _____

PREFERRED VISUAL ACUITY NOTATIONS

DISTANT VISION. Use Snellen notation with test distance of 20 feet. (Examples: 20/100, 20/60). For acuities less than 20/200 record distance at which 200 foot letter can be recognized as numerator of fraction and 200 as denominator. (Examples: 10/200, 3/200). If the 200 foot letter is not recognized at 1 foot record abbreviation for best distant vision as follows:

HM	HAND MOVEMENTS
PLL	PERCEIVES AND LOCALIZES LIGHT IN ONE OR MORE QUADRANTS
LP	PERCEIVES BUT DOES NOT LOCALIZE LIGHT
No LP	NO LIGHT PERCEPTION

NEAR VISION. Use standard A.M.A. notation and specify best distance at which pupil can read. (Example: 14/70 at 5 in.)

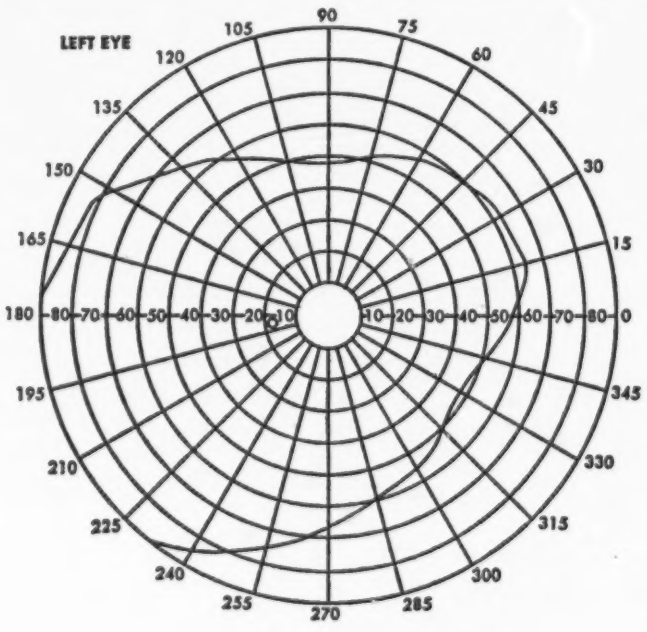
TABLE OF APPROXIMATE EQUIVALENT VISUAL ACUITY NOTATIONS

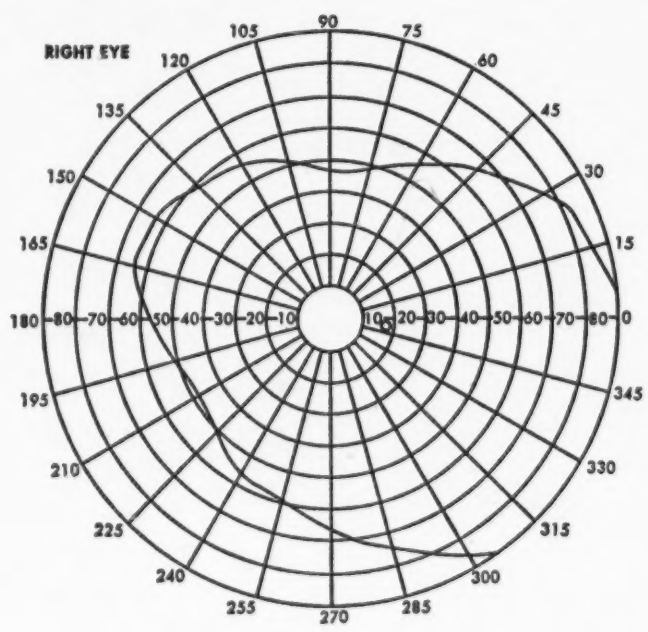
These notations serve only as an indication of the approximate relationship between recordings of distant and near vision and point type sizes. The teacher will find in practice that the pupil's reading performance may vary considerably from the equivalents shown.

Distant Snellen	*Near*			*% Central Visual Efficiency for Near*	*Point*	*Usual Type Text Size*
	A.M.A.	*Jaeger*	*Metric*			
20/20 (ft.)	14/14 (in.)	1	0.37 (M.)	100	3	Mail order catalogue
20/30	14/21	2	0.50	95	5	Want ads
20/40	14/28	4	0.75	90	6	Telephone directory
20/50	14/35	6	0.87	50	8	Newspaper text
20/60	14/42	8	1.00	40	9	Adult text books
20/80	14/56	10	1.50	20	12	Children's books 9-12 yrs
20/100	14/70	11	1.75	15	14	Children's books 8-9 yrs.
20/120	14/84	12	2.00	10	18	Large type text
20/200	14/140	17	3.50	2	24	
12.5/200	14/224	19	6.00	1.5		
8/200	14/336	20	8.00	1		
5/200	14/560					
3/200	14/900					

FIELD OF VISION. Record results on chart below.

Type of test used:_____ Illumination in ft. candles:_____





Test object: Color(s)_____ Size(s)_____ Test object: Color(s)_____ Size(s)_____

Distance(s):_____ Distance(s):_____

Stat 4 Rev/665/20M National Society for the Prevention of Blindness, 16 East 40th Street, New York, N.Y. 10016

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Telephone: 502-895-2405

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BRAILLE

Book Title_____ Edition_____
(Give grade level if part of name in a textbook series) (If given in title)

Series Name (if textbook)_____ School Grade:_____

Author(s)_____
(List all names, last name first, and separated from each other by semicolons)

_____

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(Include also city and state of publisher's address)

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REPORT FORM FOR CENTRAL CATALOG OF VOLUNTEER-PRODUCED BOOKS

BRAILLE

Book Title_____ Edition_____
(Give grade level if part of name in a textbook series) (If given in title)

Series Name (if textbook)_____ School Grade:_____

Author(s)_____
(List all names, last name first, and separated from each other by semicolons)

_____

Ink-print Publisher_____
(Include also city and state of publisher's address)

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Order Approval_____

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APPENDIX F

DIVISION FOR THE BLIND AND PHYSICALLY HANDICAPPED

THE LIBRARY OF CONGRESS

WASHINGTON, D. C. 20542

REFERENCE DEPARTMENT

1291 TAYLOR STREET, N. W.
AREA CODE 202-882-5500

REQUEST FOR TALKING BOOK SERVICE

Name _____

Address _____

Age (Nearest Birthday) _____

Education Level _____

Reading Interests _____

MEDICAL DIAGNOSIS _____

Physical reason why applicant cannot read normally:

_____

_____

MAIL THIS FORM TO:

Division for the Blind and
Physically Handicapped
Library of Congress
Washington, D. C. 20542

Machine serial number _____

Issued by: _____

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CERTIFIED BY:

_____
(Name)

_____
(Title)

_____
(Address)

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(Date)